Clinical Lectures ON TUBERCULOUS DISEASE OF THE BONES.

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LECTURE I.

GENTLEMEN,—In a former lecture on acute osteo-myelitis (THE LANCET, June 20th, 1876), I referred to a case in which I had recently excised the os calcis on account of an abscess in its cancellated tissue. Returning to the history of H. T——, we find he was a member of a phthisical family, and had a number of enlarged glands on either side of his neck; he was, in fact, a scrofulous subject. Some four years ago, after having taken an unusually long walk, he was seized during the evening with violent deep-seated pain in his right heel. His impression at the time was that he had sprained his foot, but however this may have been, he suffered from more or less constant pain, which always increased towards night. His foot was swollen, and he could not bear the slightest pressure upon the heel. After being confined to his room for some months these symptoms gradually subsided, but the pain soon returned, and he continued to suffer more or less for upwards of twelve months, when an abscess burst on the inner and under part of his foot and gave exit to some matter. This seems to have relieved the pain, but the discharge has since continued both from the original and fresh sinuses which have formed on the inner side of the heel.

H. T—— came under my care after suffering in this way for four years. He was then unable to put his right heel to the ground; the soft structures covering it were swollen, and there was a constant discharge from various sinuses on the inner side of his foot. On passing a probe down upon the os calcis I could not discover any bare bone. Under these circumstances, I made an exploratory incision into the soft parts, and discovered a small opening through the lower surface of the bone leading to a cavity in the centre of its cancellated tissue, and I therefore removed the whole of the os calcis, with the exception of a thin slice along its upper and anterior articular surfaces. From the time of the operation—May, 1876 (he has come up from the country to-day in order that you may see the condition of the parts)—his health has greatly improved. The sinuses have all healed, and new bone has partly replaced that which I removed, so that he has resumed his occupation, and does not even require the aid of a high-heeled boot to enable him to walk about.

The above history gives us an outline of a class of cases, instances of which are to be met with in almost every surgical ward throughout the country. The patients are usually either delicate children or young persons under adult age; as a rule, they are members of a phthisical family, and present the characteristic features of persons suffering from a scrofulous diathesis. They frequently date the commencement of the disease of the bones from which they suffer to an accident; in the case of H. T—— to a sprain or over-exertion. Under some such circumstances the patient is attacked with deep-seated pain situated in the extremities of one of the long bones, or it may be in the cancellated structure of one or more of the bones of the hand, foot, or vertebral column. The pain is almost always worse during the early part of the night, so that a child who has appeared comparatively well during the day will cry for two or three hours after going to bed from pain in the affected limb. The first onset of pain is sometimes prolonged over a period of several weeks; the soft structures round the seat of disease become more or less red and swollen, and any pressure on or movement of the affected part aggravates the pain. In other cases the advent of the disease is insidious; there is no external inflammation—in fact, the only complaint the patient has to make is that he suffers from a deep-seated gnawing pain. He can hardly tell you the exact seat of the pain; it is somewhere, perhaps, in the foot or heel, but he seldom puts his finger on a peculiarly painful spot. A sudden jog or violent exercise is certain to produce an accession of pain. Under the influence of rest these symptoms subside, to recur, however, within a short period; and so, if one of the lower extremities is affected, the patient is too often confined to his room for a considerable time, he becomes weak and anæmic, the local affection gains ground, and the diseased bone rots, an opening is formed through which the disintegrated structure escapes externally, or it may be into a neighbouring joint. On the other hand, we meet with patients who have suffered from attacks of pain and other symptoms such as I have described—in the lower end of the femur, for instance; but the symptoms subsequently subside, and the functions of the limb are restored.

I must now direct your attention to this preparation taken from the lower end of the tibia of a young woman, whose leg I amputated on the 27th of May last. You will observe that a cavity extends from its lower articular surface for an inch and a half upwards towards the medullary canal. In the fresh specimen, the bone surrounding this cavity was extremely vascular (fungating caries); otherwise it looked healthy; but on making thin sections through the bone, and soaking them in glycerine, we notice several opaque spots, about as large as a No. 3 shot, situated in the cancellated tissue, and on further examination we find that these opaque spots consist of extremely hard nodules of calcareous matter, which lie in a structure composed of a fine reticular network of adenoid tissue, its meshes being crowded with round cells resembling lymph-corpuscles (spawn-like); besides these cells, there are innumerable free nuclei or specks of protoplasm filling up the interstices between the cells; the periphery of these nodules and their envelope is sharply defined, the surrounding medulla being normal. We have evidently, therefore, in this specimen an example of tubercle which has undergone calcification in its centre. But, on making a further examination of these sections of bone, we observe several non-vascular, opaque, grey, and soft patches, about the size of a split pea; and under the microscope we discover that the outer layers of these formations consist of precisely the same elements as those which surround the calcareous deposits, but the centre of these opaque patches contains disintegrated osseous, and fatty matter. In fact, the tubercular growth has liquefied, and there seems no reason to doubt that the large central cavity in this tibia has been formed by a precisely similar process, there having in the first instance been a growth of tubercle in the cancellated tissue of the bone, which had undergone degenerative changes, its liquid contents ultimately escaping into the ankle-joint. It is not often we meet with a better specimen than this of tuberculous disease of the cancellated tissue of the bones. I might show you numerous microscopical preparations of tubercle in the medulla, but I doubt if it would be possible for you to appreciate their significance, unless by a careful study of the coarser manifestations of the disease; for if you were to place microscopical preparations of tubercle, syphilitic, sarcomatous, or carcinomatous new formations before me, it is more than probable I should fail to distinguish the one from the other; but after examining these sections of bone by means of the naked eye, aided by the microscope, I have no hesitation in asserting that the disease in this case arose from tubercle.

We may now refer to the alterations which occur in the early stages of tuberculosis of the medullary tissue, and I think the only way of preparing specimens of the kind is to make sections of the fresh bone with a very fine saw, and allow them to soak in a 20 per cent. solution of chromic acid and water for fifteen or twenty days, and subsequently in a solution of chromic acid and glycerine for a considerable time. If affected by the early stages of tuberculous disease, under a half-inch objective, as in these preparations taken from the medulla in a case of diseased vertebræ, some of the soft structures contained in the cancellated tissue present dark streaks running through them; these streaks follow the course of the vessels, and if we isolate some of this tissue and again soak it in chromic-acid solution, and pencil out the soft structures with a sable brush, examining it under

a quarter or an eighth of an inch objective, we discover that the appearance of the streaks above referred to is due to clusters of granular cells growing from the tissues surrounding the outer coats of the vessels. My own conviction is that the tubercle is not the outcome of a morbid action on the part of the adenoid or connective-tissue cells contained in healthy medulla; but, however this may be, it seems quite evident, as the tubercle grows, the contents of the cancellated tissue disappear, and that its place is occupied by an opaque, sparingly vascular, fibro-cellular formation, which has a strongly-marked skeleton of connective tissue, its meshes being filled by various-sized granular cells.

I have had the opportunity of examining the bodies of twelve persons who have died of phthisis, with the object of discovering if, in cases of the kind, there was any evidence of tuberculous growths in the medulla. I selected the lower end of the right femur and tibia for examination, and in two cases out of the twelve I discovered changes such as those I have described above in the medulla. It is remarkable, however, that in two cases of tubercular meningitis occurring in young children I found the medullary structure in the bones extensively affected, but none of these patients during life had any symptoms indicating that they suffered from disease of the bones; in fact, from the anatomical appearances presented after death we should hardly have expected that such would have been the case, for by far the greater part of the medulla was healthy and capable of performing its normal functions.

On examining sections of the os calcis removed from H. T——'s foot, we find that the medullary spaces near the central cavity in the bone are choked with this spawn-like or tubercular growth, and it is evident that when a considerable portion of the cancellated structure of a bone is occupied by an abnormal structure of this kind, the osseous trabeculæ before they break down undergo similar changes to those which have occurred in the surrounding soft tissues—that is, trabeculæ actually projecting into the abscess or cavity in this os calcis present under the microscope a wormeaten appearance, many of the spaces occupied by the bone corpuscles and their lacunæ being filled with dark granular matter, and in close proximity we see small shallow pits in the bone formed by the scaling off of the dead bone corpuscule with its surrounding shell of bone earth. There is no evidence whatever of sclerosis of the trabeculæ, as would certainly have been the case if the disease had been caused by chronic inflammation of the part; in fact, except along the walls of the abscess, the trabeculæ throughout the bone are perfectly healthy, there being no tendency to alterations in the hard, as disintegrated from the medullary, tissue, at or beyond the immediate area of the central cavity. It is true the greater part of the walls of this abscess are lined by a thin layer of hard bone, but this was not formed from elements contained in the cancellated tissue of the diseased bone, but from an ingrowth of the periosteum into the cavity. Processes of this bone-producing membrane have inserted themselves along the sides of the abscess like ivy clinging to an old wall, and so this lining layer of bone has been formed, and it is remarkable that its lacunæ and canaliculæ run parallel to the free surface of the membrane, as they do beneath the periosteum of the shaft of one of the long bones.

I must now briefly refer to the pathology of the disease we have been considering. It is evident that in cases of tuberculosis of bone the medullary structures are those which are first affected—in fact, the disease may run its course up to the stage of liquefaction without the trabeculæ being involved in the abnormal action. In this respect the progress of tubercle differs clearly from that of ordinary inflammation. The cellular elements of the tubercle as they grow choke the vascular and other structures contained in those portions of the medullary tissue which it invades, and, in consequence either of its inherent properties or of its non-vascular character, it degenerates into a soft fatty material, which is finally washed out of the bone by the stream of fluid which percolates into it from the surrounding vascular area. For you must distinctly understand that in the living bone the parts beyond a tubercular cavity such as I have described are extremely vascular, and it necessarily follows that when the tubercle breaks down and forms, as it were, a well in the centre of the bone, the surrounding fluid will drain into it. There must ultimately be an outlet for this pent-up fluid, which escapes therefore through the passage of least resistance—it may be into a joint or externally through the skin,—but we cannot doubt but that the constant drain of fluid from the more healthy through the diseased tissues greatly influence the condition of the latter, and it seems reasonable to suppose that if by any means we could control the supply of blood to the parts, we might modify the abnormal action going on there.

The changes observed in this os calcis plainly indicate the reason why we sometimes fail to alleviate the conditions under which a patient suffers by removing what seem to be the diseased structures. We might have scooped out the walls of this abscess, but nevertheless have left cancellated tissue behind filled with tubercle, from which osseous structure could not have grown to close the cavity in the bone (see THE LANCET, vol. ii. 1876, p. 568), because the new growth had destroyed and replaced the medulla from which bone is formed; on the other hand, by means of an operation it is quite possible to imagine that by clearing away the disease, and setting up a new kind of action in the part, we might greatly facilitate the drainage through the tissue, and so altered its conditions that healthy nutritive changes would have been set up in the surrounding medulla, and the disease might have been cured. In the case of H. T——, it was practicable, without interfering with a joint, to remove the disintegrated tissues. I calculated on the medulla beneath the hard lamina of bone entering into the formation of its articular surfaces being healthy, and my ideas have turned out to be correct. From the layers of bone I left attached to the astragalus and cuboid you can see and feel that new bone has been reproduced, and although neither I nor my patient can flatter ourselves that he has got a perfect os calcis in the place of the one I removed, we have both, as I am certain he will assure you, reason to be glad that I did not amputate his foot, and thus mutilate his limb for life, when, as the result demonstrates, there was no necessity for doing so, although he was suffering from tuberculous disease of the bone.

Harveian Lectures
ON
SYPHILIS.

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LECTURE II.—PART II.

Vaccino-syphilis.—In connexion with the question of contagion by the blood we come to the interesting question of vaccino-syphilis. The reality of the communication of syphilis by impure vaccine lymph has been only too clearly proved, and the opinion generally held is that it has depended upon the accidental admixture of blood with the lymph employed. Cases of this kind are extremely rare, and have fortunately till lately been almost unknown in this country; at all events, if they have occurred, they have not been made sufficiently public to awaken the profession to a sense of the danger until Mr. Hutchinson, in 1871 and 1873, communicated to the Medico-Chirurgical Society the history of some remarkable groups of cases. The risk, however, seems to have been suspected long ago, for Lancereaux states that attention was drawn to it in 1805 by an English surgeon named Moseley. In 1814, an Italian surgeon named Marcolini records as follows. A little girl born of syphilitic parents served for the vaccination of ten children; from these thirty others were vaccinated, making forty in all. The whole number are said to have had syphilis, and several died. Other examples of this kind appear to have cropped up at intervals in different parts of the Continent, including the well-known one at Lupara, in Naples, in 1856, when

thirty-four children contracted disease, and were the means of conveying it to a number of other persons. But, in spite of these facts, the possibility of this mode of infection was hardly admitted till 1860, when Dr. Viennois, of Lyons, published a work on the subject; and he, after examining all the cases recorded, came to the conclusion that it was the blood, and not the vaccine lymph, which conveyed the disease. Soon after—in 1861—the celebrated Rivalta case occurred, where the same lymph served in succession for the vaccination of sixty-four children, of whom forty-six were infected, and conveyed the disease to twenty of the mothers and nurses. Several of the children died. It is a curious coincidence that all these severe outbreaks of vaccino-syphilis should have happened in Italy, and in country villages rather than in large towns.

Lancereaux collected 351 cases in which vaccination was performed with lymph which appears to have been impregnated with syphilis. Of the 351, 258 contracted syphilis, while 93 only escaped.

Since Lancereaux's work was published, we are indebted to Mr. Hutchinson for his series of cases, which are recorded by him in his usual careful and complete manner. In the first series in 1871, twelve persons, mostly young adults, were vaccinated from an apparently healthy child, but which soon afterwards showed evident signs of constitutional syphilis. In all twelve the vaccination progressed satisfactorily, but in ten indurated chancres were developed at the seat of the punctures by the eighth week. All were treated with mercury, and in all the primary sores quickly disappeared, but in four of them constitutional symptoms appeared five months after the vaccination. There is reason to believe that blood was mixed with the lymph in these cases. Mr. Hutchinson's second series occurred in May, 1871. The vaccinifer was a child in good health and condition, but with slight local symptoms of inherited syphilis. Twenty-six persons had been vaccinated at the same time from this child. Out of the twenty-six there were unmistakable symptoms of secondary syphilis in nine, all children, suspicious symptoms in six others, and entire escape, as far as was known, of the remainder. Mr. Hutchinson published two other cases, which I need not detail, but will merely observe that in them, as in the second series mentioned, there was no evidence that the lymph was contaminated with blood.

It seems clear, then, that cow-pox and syphilis can be conveyed simultaneously by inoculation. When this takes place, the two diseases are developed independently and without interfering the one with the other, and there is a singular uniformity in the course which they are found to follow. The vaccine vesicles are developed as usual, but at the end of a month or five weeks, and usually not till after they have healed, a chancrous induration appears at one or more of the inoculated points, and a few weeks later the ordinary train of secondary affections follows. Or the result, as regards vaccination, may be negative, as it so often is in revaccination; the punctures heal and are forgotten, but after the usual interval the syphilitic symptoms make their appearance.

There were some who blamed Mr. Hutchinson at the time for making these cases public, but he wisely deemed it better that the knowledge of such a danger should be diffused as promptly and widely as possible. The profession in England had till then been incredulous on the point, and a full knowledge of the risk was clearly the first step towards preventing the occurrence of such lamentable accidents in the future.

I have referred to the prevalent opinion that it is the blood, and not the vaccine lymph, which conveys the contagion—a view which seems to be strengthened by the fact that Rollet and others have vaccinated with lymph from syphilitic children, carefully avoiding any admixture of blood, and the result, as regards syphilis, has hitherto been negative. Such negative results, however, are quite inconclusive; for, even with syphilitic blood, carefully inoculated on purpose, the failures have been in the proportion of about three in every four attempts. The question is,—Can we be certain that the admixture of blood is necessary? Mr. Hutchinson thinks that probably it is not, but he evidently thinks that it greatly increases the risk, for he suggests that if the vaccine vesicle be drained too freely, corpuscular elements of the blood and tissues may readily become mixed with the lymph, and that this mixture may account for some persons becoming infected while others vaccinated from the same source escape. This, however, is hardly more than an hypothesis, and the only safeguard we have is to inquire carefully into the antecedents and present condition of every child before vaccinating from it, and if there is the slightest doubt attaching to its history, to reject it as ineligible. It is clearly proved that syphilitic blood may convey syphilis, but it is not yet proved that vaccine lymph from a syphilitic child, however carefully taken, will not, and it would therefore be the height of imprudence to act on any such belief.

Mr. Hutchinson's cases are all examples of direct communication from a diseased child to those vaccinated from it, and this is a mode of transfer which one's mind readily admits; but it is very difficult to conceive that healthy persons so inoculated, when made use of a week afterwards to vaccinate others, and long before they have themselves developed any syphilitic symptoms, should be equally capable of conveying that disease, as is stated to have happened in most of the continental groups of cases. Can it be possible that a syphilitic inoculation which does not affect the system sufficiently to produce even a local result in the form of a primary sore for five or six weeks, and no general result till some weeks later, should in one week have so contaminated the whole mass of the blood as to render it, or its products, inoculable at the end of that short time? This would imply a general and thorough infection of the system in the early part of the incubation period—a view in the pathology of syphilis which, as far as I know, has never yet been suggested.

It is so extremely unlikely that, for myself, I cannot accept the facts as authentic without much fuller and more rigorous investigation. If it were true the prospect would be indeed alarming. It would be useless to inquire into the health of a child before vaccinating from it, for it might have been infected by vaccination from a syphilitic child a week before, in which case it would appear perfectly healthy, and would not present any outward sign of syphilis till four or five weeks later. It would, in fact, be necessary to search back through a series of five or six consecutive vaccinations before any certainty of safety could be attained. If the disease were really capable of being conveyed in this manner in geometrical progression, vaccine syphilis would surely have been the rule amongst us by this time, instead of being the very rare exception, which we know it so fortunately is. There would then be nothing for it but constant recurrence to the cow—an expedient which might probably be resorted to with advantage much more frequently than it is.

Contagion of the secretions of syphilitic patients.—The question of the contagious property of the secretions of syphilitic persons, such as the pus of an ordinary abscess, the morbid secretions of mucous membranes, the pustules of acne, the serum of eczema, &c., is analogous to that of unmixed vaccine lymph. The matter of acne and of eczema from syphilitic patients has been inoculated by Diday on healthy persons, but with no effect, and the tendency has been to consider all such secretions as harmless, or, at least, that the contrary is not proven. Lately, however, in 1870, the late Mr. Morgan, then surgeon to the Westmoreland Lock Hospital, Dublin, related some experiments which favour the opposite conclusion. He performed a number of inoculations with the matter of purulent vaginal discharge. When the discharge proceeded from a patient free from syphilitic taint, the result was negative, but when it was taken from a patient with secondary disease, the effect was the production of an ulcer, exactly resembling a soft chancre, and, like it, readily reinoculable. He was careful to ascertain by examination, externally and through the speculum, that no ulceration, either primary or secondary, coexisted with the discharge. His experiments were performed either on the patients themselves or on others who were syphilitic; he did not, of course, feel justified in inoculating healthy persons. The result was exactly what has been found to happen when the matter of hard sores or of secondary affections has been inoculated on syphilitic patients, and there is good reason to suppose, therefore, that these purulent discharges from syphilitic patients are charged with syphilitic infection, and might convey it to an untainted person. This would explain the result of Hunter's inoculation of himself, and also those exceptional cases in which syphilis is apparently the result of gonorrhœa.

Next, as to the physiological secretions of syphilitic persons—the tears, the saliva, the perspiration, the semen, and the milk. The balance of opinion is against their contagious quality, always supposing them to be unmixed with the products of any secondary lesion. Inoculation with the first three—namely, saliva, tears, and perspiration—has been tried, and has hitherto failed. I do not know that the inoculation of semen has been tried, but I believe there is no instance in which, when the male organs were free from disease, the semen of a syphilitic patient has infected a female in the usual way by the production of an indurated sore. But there is another way in which the semen may possibly convey disease. There are some who think that an infected man, cohabiting habitually with the same woman, may develop a secondary infection in her by the gradual absorption of the elements of the contaminated seminal secretion into her circulation, without the intervention of pregnancy, or any kind of primary lesion. The late Mr. Porter, of Dublin, and the late Mr. Langston Parker have recorded cases in favour of this view. Both are authorities whose opinion deserves attention, and the point is one well worth further consideration. The difficulty in all these cases is that the woman may at some time during the cohabitation have had an indurated sore, which caused her so little inconvenience as to remain unnoticed.

With respect to the milk, it is generally believed that a healthy child suckled by a diseased nurse will not contract disease unless the nurse has some secondary lesion on the nipple or in its neighbourhood;—that the milk itself, in fact, does not convey the disease. It is possible, however, that the milk, although diseased, may, if the child's mouth and lips are free from abrasion, be passed into the stomach without causing any mischief in its transit, and then be so changed by the action of the gastric fluid as to lose its contagious quality. Some experiments do, in fact, throw some doubt on the innocuity of this secretion. M. Voss, of St. Petersburg, has recently inoculated three prostitutes with milk from a syphilitic woman. The milk was injected subcutaneously with a syringe. One of these women was already syphilitic; in her no result was obtained. In another, whose condition as to previous syphilis was doubtful, the result was also negative; but in the third, a girl aged sixteen, who had never had syphilis, papular spots appeared around the inoculated point forty days afterwards, and were soon followed by a general syphilitic eruption.

I do not pretend to offer a decided opinion on these various uncertain points; but I see no reason why secretions, whether natural or morbid, which are formed from diseased blood, should not partake of the contagious quality of the fluid from which they are derived. At all events, the only safe course is to regard every one of them with profound distrust; and to take such precautionary measures, and to give such advice, as the circumstances seem to call for.

ON THE

TREATMENT OF SCROFULOUS LYMPHATIC GLANDS BY A PAINLESS ELECTROLYTIC CAUSTIC.[1]

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THE treatment about to be described for so common a malady as that known as "scrofulous glands," though but another method of attaining an end most commonly aimed at, is, in its *modus operandi*, so different throughout from anything at present employed that it becomes almost a new remedy. A somewhat detailed account, therefore, of its application and action will be requisite; while how far it has been of real benefit to the patients will appear from a perusal of the eight cases in which it has now been employed.

Before describing this treatment, however, the class of cases in which it has been employed, and for which it seems especially adapted, must be defined. From first to last the morbid condition of the lymphatic glands known as "scrofulous" or "strumous" passes through three very distinct stages, which it is necessary to distinguish, in order to classify the methods of surgical treatment suitable to each case.

In the first stage the glands increase in size, with pain amounting to little more than inconvenience, and with a complete absence of those very acute inflammatory symptoms that accompany their rapid enlargement, which results from the absorption of some irritating material from an adjacent suppurating surface, and which enlargement ends usually in acute abscess. This is not the course of abscesses that result from scrofulous inflammation of the lymphatic glands. To some source of irritation, indeed, the disease may often be traced; and though this may eventually disappear, yet the enlargement continues for months and even years. In this stage the surgeon does not interfere; he trusts to general improvement of the health and to better hygienic conditions to stay the progress of the disease. After a while all may subside, or at once the third stage may supervene; if not, the second stage will be reached, where, active growth ceasing, the swollen and hard glands remain as tumours beneath the unbroken skin, and can be distinguished easily on manipulation; or the whole mass having become agglutinated and encapsuled, a lympho-sarcoma is the result.

Though caustics may be employed for the removal of these gland-masses, yet, especially where they are freely movable or encapsuled, excision is the best treatment. One of the cases I shall narrate was in the second stage, and though a complete recovery followed in seven weeks, without any suffering, yet it would have been even more rapid had excision been adopted. The case was under Mr. Cooper Forster's care, by whose kind permission I am enabled to make use of it.

The characteristics of the third degree of the inflammatory state differ from those that precede it. The glands have now mostly ceased to enlarge, unless they are doing so simply as the result of the irritation occasioned by the more active change going on in their neighbourhood; they are no longer free, but form a mass in which the outline of the original glands may perhaps still be distinguished; but whether this be the case or not, the whole is bound to the overlying skin and to the surrounding tissues by inflammatory adhesions. Hard in some parts, it is red, tender, and softening in others; and here fluctuation may be detected; and then, if the pus be evacuated and poultices applied, the opening, in lieu of contracting and healing after discharging a slough, often remains patent, and a granulating mass protrudes, which may exist, with little or no tendency to heal, for a long time. The treatment in this stage is not that by excision. The patients are generally sickly, and bad subjects for operative interference, even were it possible; but it is scarcely so in many cases, for the glands, now matted by inflammation, often enclose between them important structures. Where, however, it is feasible, the measure usually adopted is to incise the overlying tissues and then scoop out all that is removable with a blunt scalpel or spoon-handle. In by far the greater number of patients the only application is a poultice, or simple water-dressing, time being invoked to complete the cure.

Another alternative yet remains in the removal of the glands by caustics; and I shall only mention that by chloride of zinc, for the electrolytic caustic depends upon the formation of this salt for its destructive properties. Chloride of zinc is usually employed as points or arrows, the salt being made into a mass of sufficient consistency by its admixture with flour or gluten. A horny substance is the result, which, cut into wedge-shaped pieces, can be inserted into the part required, a puncture having been previously made with a bistoury. Nothing can be more desirable than the results obtained from this form of caustic. It acts at whatever depth it may be inserted; it destroys the tissues around it; and after some days the remnant of the "arrow" may be removed, and together with it a grey, hard slough; a cavity remains, that gradually fills up and cicatrises. It has, however, in common with all the ordinary caustics, certain serious drawbacks. The patient must be invalided during the treatment, and the pain is very severe during the first forty-eight hours; and this last, in children, becomes a serious impediment to the use of the

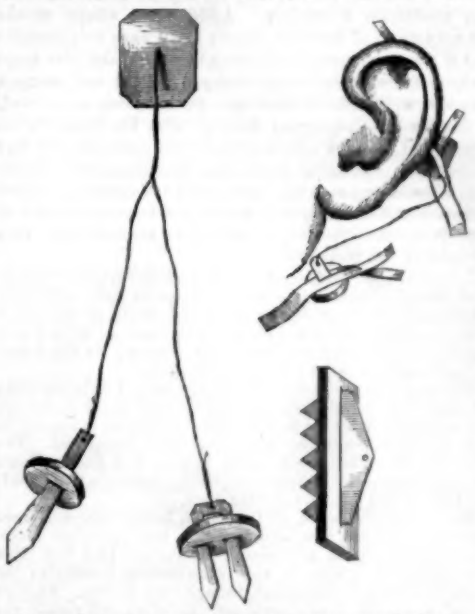
[1] Read before the Hunterian Society, March 14th, 1877.

caustic altogether, while unfortunately it is in children that we mostly meet with the condition requiring the remedy.

By employing the chloride of zinc in the way I am about to describe as effective a caustic may be obtained as where the "arrows" are used, and one which is quite painless as a rule. That the caustic should be painless at first sight seems strange; but when we have considered the exact mode of production of the chloride of zinc, taking into account the slight natural sensibility of the parts operated upon, the explanation of this circumstance will be easy. The whole treatment depends upon the production of the chloride of zinc, in the tissues of the body, at the expense of the chlorides in the serum, which are caused to unite with a slip of metallic zinc thrust in at the spot destined to be destroyed. To understand this, I need but recall what happens in a Smee's battery when the electrodes are united and the circuit consequently completed: not only is an electric current established, but the acid uniting with the zinc forms sulphate of zinc, while the hydrogen is evolved at the electro-negative or silver plate. If in lieu of sulphuric acid we employ chloride of sodium, a parallel change takes place: chloride of zinc is formed, and the sodium is set free at the silver plate, and becomes at once oxidised into soda. In this case, therefore, we have, instead of the two inert metals, two active salts; and if any albuminous substance, capable of being acted upon by the chloride of zinc, be present in the solution, it will be simultaneously affected. Let the silver and zinc plates be therefore placed one on either side of a piece of flesh, and be connected together by a copper wire, and the same changes will occur. The flesh is—for our purpose—a firm albuminous basis, bathed in serum or chloride of sodium solution; and the chloride of zinc that is formed, having a powerfully coagulating (and therefore destructive) effect upon albuminoid tissues, will cause marked changes in the space of a few hours. The flesh under the zinc plate will be no longer red, soft, and alkaline, but will be converted into a grey friable material, strongly acid to test-paper; while the presence of the soda under the silver plate may be proved by its strongly alkaline reaction. Each molecule of chloride of zinc, as soon as it is formed, or even in the very act of forming, exerts an influence upon the albumen with which it is in contact, and coagulates it; and it is to this action of the chloride of zinc in a "nascent state"—to use the chemist's phrase,—or, in other words, to its action by successive particles at the moment of their formation, that the absence of pain, when the living body is being operated upon, must be ascribed.

To carry out the plan of treatment of which the above is the theoretical explanation, the surgeon must be provided with some silver foil, at least the thickness of cartridge paper, some of the thinnest sheet zinc (that can be easily cut with ordinary scissors), and some fine copper wire. The zinc is cut into slips of the size required, according to the depth to be destroyed, pointed at one end, and pierced with a hole at the other. A slip, 1½ in. long by ¼ in. wide, gradually tapering to a point, is a useful size (*vide* woodcut). To extend its surface it may be bent into a horseshoe, or, if required to destroy a long but narrow surface, the edge of a piece of zinc coarsely serrated may be employed. Whatever form be selected, let the piece of metal pass through a shield of thick gutta-percha or cork, both for the purpose of regulating its length, and to give attachment for the strapping by which it is fixed. The silver foil should be of the size of a shilling, or a little larger, and to the centre of one surface should one end of a short piece of copper wire be soldered; the other end of the wire is thrust through the hole in the free end of the zinc point, and twisted firmly to it. Thus a battery is constructed with its electrodes united and ready for action. Several pieces of zinc may be used in connexion with one piece of silver if necessary. Two raw surfaces must now be selected, one for the insertion of the zinc, the other for the silver. Of course the case, if a suitable one, will present at least one sinus for the zinc, and that for the silver can be easily made, and is best made by raising a small blister in the neighbourhood. When operating on the neck I usually blister over the mastoid bone.

Into the sinus that leads down to the gland-mass the zinc must be thrust until it is firmly embedded in the part that is to be destroyed. The required length can be easily measured beforehand, and the position of the shield regulated accordingly; and so it may be thrust with one stab up to the gutta-percha at once; it is then retained by strapping. The silver is simply laid on the other raw or blistered surface (the blister having been recently cut, so as to be moist with serum), and there strapped also *in situ*. A battery, with its circuit completed by the copper wire electrode, is thus formed, the exciting fluid for which is the serum in the patient's blood. One caution is necessary—viz., let no solder get on that surface of the silver which is nearest the patient, or a sore will result. As a rule, the



This woodcut represents the electrolytic caustic arranged with two zinc points; also the form of zinc used in Case 7; also the caustic applied. (The apparatus is made by J. H. Sandy, Cooper's-road, Old Kent-road, S.E.)

zinc is sharp enough to enter at once, if not, a bistoury puncture can be made. Sometimes a patient feels the prick of the zinc, but as often not, and then no further pain or inconvenience follows. Four or five days are usually enough for each application. The following changes will then be noted. The blistered surface will be found drier, strongly alkaline in reaction, and in part healed, for under the silver plate cicatrisation of a wound is promoted. On removing the zinc a gray slough will be seen, in lieu of the red granulation tissue before visible, and strongly acid to test-paper. At times this slough will come away with the piece of zinc, or it may be detached with forceps, or, if not loose, it may be removed by poulticing. The apparatus can then be reapplied if necessary, for the same pieces of metal, if kept clean, may be used many times.

(To be concluded.)

ON TRANSFUSION OF BLOOD IN CHRONIC ANÆMIA FOLLOWING INJURY.

BY RICHARD BARWELL, F.R.C.S.,
SURGEON TO CHARING-CROSS HOSPITAL.

TRANSFUSION has been employed with great advantage in cases of hæmorrhage, whether post-partum or from wound, but not, as far as I am aware, in that condition of system which may aptly be termed chronic traumatic anæmia—a condition of anæmia and bloodlessness produced by long-continued suppuration and by the waste of reparative processes larger than the patient's strength can support. In such states the sufferer generally eats but little; he may, perhaps, take a fair amount of stimulants, and may have quinine, iron, or other tonics administered. Yet, whether

he eat little or much, or however he be treated, his strength diminishes day by day, his blood-supply gets smaller and smaller, until at last he has not enough to carry on the work of his body and its organs. In these conditions I have been constantly struck by the powerlessness to which the surgeon is reduced. The stomach is his only hold upon the patient's life, but the capacity for digestion and assimilation diminishes constantly. Assimilation simply means the conversion of food into blood; and I have long thought that if we could spare the stomach this work, and give blood ready-made, we might save many a patient and many a limb that would otherwise be lost. On becoming acquainted, at the Medico-Chirurgical Society, with Dr. Roussel's instrument, I felt the only scruples I had—namely, the fear of embolism and other such dangers—disappear.[1] Therefore, after having seen this instrument and carefully studied its action and advantages, I determined to put this idea to proof in the first case which seemed to me suitable. This occurred in the person of

J. D——, aged forty-four, who was admitted into Charing-cross Hospital under my care on December 2nd, 1876, with a compound fracture of the tibia and fibula at the junction of middle and lower thirds: the external wound was nearly an inch and a half long, very jagged; its edges and the parts around were very much bruised.

The case was treated antiseptically, and, I believe, without any error or omission, yet the bruised parts sloughed, and suppuration set in; indeed I hardly see how, in the condition of tissues, anything else could have happened. The man was of rather intemperate habits, and had a smart attack of traumatic delirium, requiring energetic treatment, whereby it was subdued in four days.

Feb. 1st.—The ends of the tibia, being necrosed, were removed with the saw, and the limb put up in an interrupted metal splint and plaster of Paris. In a few days the truncated bone-ends were granulating healthily; the wound contracted somewhat, though very slowly. Though therefore suppuration seemed not extending, yet repair was very slow, if it could be said to be going on at all. The granulations were pale and flabby, just capable of supporting their own life, but hardly of repairing large injury. He complained of constant dull aching at the part, which occasionally was severe enough to keep him awake. The man was getting weaker, paler, and more anæmic, the pulse smaller and weaker, the appetite less and more capricious. I therefore wrote to Dr. Roussel, who kindly acceded to my request, and came with one of his transfusion instruments.

28th.—At 10 A.M. the state of the patient was as follows. He was pale, the lips and palpebral conjunctiva nearly colourless, and the eyes rather dull and sunken. He was very quiet, almost apathetic. Pulse 115, small, and weak; temperature 99°; urine pale, without any albumen; the appetite small, requiring much tempting. At 3 P.M. the vein was laid bare by Dr. Roussel; it was very small and contracted; nevertheless, that gentleman opened it. Then, his attention being required to other parts of the manipulation, he requested me to pass the cannula. In this there was at first a little difficulty, partly owing to the contracted state of the vein, partly to the opening being made by one person and the introduction by another; a little blood therefore became effused into the cellular tissue. When the position of the cannula was rectified, the man received from the arm of Mr. Watson (student) 8½ oz. of blood, being twenty-five strokes of the elastic ball. During the operation the patient's eyes became markedly bright and fuller, and his face flushed; his skin became warm and moist, after a little while perspiring freely; the pulse became fuller, stronger, and fell to 95. He complained of fulness and oppression at the chest; but after taking, as he was directed, two or three deep inspirations, this sensation disappeared. A quarter of an hour after the transfusion he was put to bed. He had some sense of fulness down the spine, and aching at the loins; otherwise was very comfortable. The granulations at the seat of fracture, which previously were pale and flabby, were now well coloured and of good consistence. The dressings were slightly blood-stained from rupture of some small vessel, but whether caused by movement or by the rapid influx of new blood cannot be determined. About half an hour after he was put to bed he had a slight rigor, soon followed by another,[2] and shortly after by copious perspiration. He felt very thirsty. Had no pain or discomfort. The sense of fulness at the back and loins had given place to one of strength, as he expressed it. The urine was abundant, odorous, loaded with lithates of a very light pink, but was perfectly free from either blood or albumen. In the evening his temperature was 102°; pulse 94, large and soft.

March 1st.—During the night he slept fairly well, waking up occasionally and rapidly falling off again. He ate a larger breakfast with more appetite than he has done for some time. Temperature 100°; pulse 98, same good character; he still perspires a little. The wound in the leg much healthier. During the day he had some headache; tongue rather coated; not inclined to eat dinner. Temperature (8 P.M.) 102°; pulse 110. Bowels have not acted.[3] Ordered half an ounce of castor oil.

2nd.—The aperient has not taken effect. He slept indifferently during the night; felt rather sick; had headache, and rather coated tongue. Slight icteroid tinge of conjunctivæ. Temperature 102°; pulse 100. He was ordered two grains of calomel, to be followed by a senna draught.

3rd.—Since the action of the purge he is much better; the tongue has cleaned; he has no headache; the pulse retains the character which it has had since the transfusion—large, full, and soft. He complains of some pain about the wound of the arm, which is rather inflamed.

5th.—He was kept restless by pain at the arm; a local cellulitis has set in; the temperature is 102·1°; pulse 92, rather harder.

6th.—Pus has formed a little above the operation wound; it was evacuated by a small incision, since which it has been comfortable. Temperature 99·6°.

14th.—Steady improvement since the last report. He eats, sleeps, and feels well; temperature averages 99°; pulse remains as before. The suppuration about the arm has given a little trouble, and, perhaps, has kept his temperature a little higher than it would otherwise have been; but it is, I wish to point out, a mere local cellulitis, not phlebitis. The wound in the leg is filling up healthily, and there seems some amount of union between the bones. There has been no pain at the seat of fracture since the transfusion.

April.—It appears scarcely necessary to report the case further, for, as the patient is doing perfectly well, it justifies the following remarks. Previous to transfusion, the man's vital forces, under the influences of shock of the accident, sloughing of soft parts, necrosis of bone, operation and very free discharge, were rapidly giving way—threatened, indeed, if the same rate of diminution continued, to become before long extinct. From the moment when he received fresh blood, all these conditions were changed. His strength, the action of his circulatory system and of his assimilative powers, have been restored. Any embarrassment, traceable in the headache, nausea, and coated tongue, points rather to excess of blood than to debility. It may be, that if the usual free evacuation had followed the transfusion those symptoms would not have arisen; but they may be interpreted otherwise. A person who has lost blood suddenly by wound, childbirth, or in any other way, suffers under what may be termed *acute* anæmia; the organs have up to the moment of the loss been used to a much larger amount of blood. On the other hand, the patient with an injury accompanied by its several debilitating sequelæ suffers from a *chronic* anæmia; the organs have been accustomed to deal with a small amount of blood. If to that small quantity several ounces of venous blood be suddenly added, it seems inevitable that certain organs having to do with the purification of venous blood may be temporarily embarrassed.[4] Probably, however, it is far better to compound with this very slight trouble than to transfuse only a small quantity with the possibility of conferring inadequate benefit, and having to repeat the operation; the absence of

[1] I am bound to say that, since this paper was written, Dr. Roussel has told me that this form of anæmia has once or twice been treated in Russia by transfusion—a fact with which, till quite lately, I was not acquainted.

[2] Rigors are constant after successful transfusion; the small amount of them in this case is somewhat peculiar.

[3] Here, again, is a peculiarity, since after transfusion patients usually have a spontaneous copious evacuation.

[4] The oppression at the chest relieved by a few deep inspirations appears to support this view.

hæmaturia, be it observed, clearly showed that we had not put in more blood than the vascular system could hold.

Thus, therefore, it seems that the great benefit of transfusion in cases of debility after severe injury is by this case fully vindicated, and that in future it will become one of the recognised resources of surgery; that, instead of exposing weakened, almost exhausted, patients to the dangers of secondary amputation, we may by this means save not only the life, but the limb; that we may, in fact, when the patient has exhausted all his own sources of power, bestow upon him a fresh supply, and start him on his work with new capital.

I cannot conclude without recording my high appreciation of Dr. Roussel's apparatus. The ingenuity of its plan, the care expended in the choice of material, and the mode of workmanship are all admirable. I must thank Dr. Roussel for his affability in assisting at this case and in teaching me to thoroughly well understand and manipulate his admirable invention.

George-street, Hanover-square.

THE TREATMENT OF INTERMITTENT OR FEN FEVER BY SALICIN.

By W. THOMSON, M.D.,

MEDICAL OFFICER OF HEALTH, CONSULTING SURGEON TO THE PETERBOROUGH INFIRMARY, SURGEON TO THE GREAT NORTHERN RAILWAY, ETC.

On making the acquaintance of Dr. Maclagan at Dundee last spring, and discussing the now recognised curative power of this remedy in acute rheumatism, I gave it as my opinion that we have in salicin a remedy equally energetic in staying or cutting short the paroxysm of ague. I determined that as soon as cases presented themselves I would give it a fair trial, acting on Dr. Maclagan's suggestions as to its administration in full doses; and I hope that the following cases will prove that the failure of the old-fashioned decoction of willow-bark, both in the hands of the inhabitants in the marshy districts, and of the medical men, was from the want of concentration, or the inability to prescribe a sufficiently large dose.

CASE 1.—R. B——, aged thirty-two, has been twice under my care, first in November, 1875, and secondly in March, 1876, for severe attacks of ague. He was a native of the Isle of Ely, Cambridgeshire; was treated with quinine, and was three weeks in hand on both occasions, and that he stated to be a shorter time than usual.

On the 2nd of October, I was sent for to see him at 10 A.M. I found him in bed shaking all over, his teeth chattering, and wearing that unhappy expression of countenance one invariably finds in these cases. Skin moist and clammy; temperature 103°; pulse 110, weak and frequent. He had a hot bottle to his feet, and had taken hot port wine without feeling better. I told him I was going to send him a new remedy, and he was to be very particular in following the directions, and noting his feelings after each dose. Thirty grains of salicin to be taken every two hours. I saw him again at 7 P.M., six hours after the first dose. Temperature 99°; pulse 80. He said he felt much better. Half an hour after the first powder the chilliness began to abate; four hours after most of the unpleasant feelings had vanished, and he thought he need not go on with the medicine. Ordered to continue the salicin every four hours.

Oct. 3rd.—10 A.M.: Found him up by the fireside, looking weak and tired, but saying he felt comparatively well. I told him to be careful, as next day he might have a relapse.

4th.—10 A.M.: Found him as on my last visit. He, however, told me that at six in the morning he had "the same old feels" come on, and had it not been for the powders (two of which he had taken), he was sure he would have had a relapse. A powder to be taken night and morning, and to come and see me on the 6th, which he did, looking much better. To stop the medicine after to-day. Seen again on the 8th, after which he went from home, and when he came back, said he had not had such a short autumnal touch for five years, and asked me for some of the medicine to keep by him.

CASE 2.—Jane G——, aged forty, seen Oct. 10th in bed. Skin wet with perspiration, very shaky, can with difficulty sit up, has been ill every other day for a week. Thirty grains to be taken every two hours until I saw her again, which I did on the morning of the 12th, when she gave me the following account:—"After the second powder the perspiration stopped, and after the fourth the chilliness had gone and the stiffness in the limbs was much relieved." Next day, as was to be expected, she was comparatively well. Next morning she was surprised to find herself equally so. To stop the medicine in the evening, and only take it again if she has any premonitory symptoms. Four days after she was quite well.

CASE 3 I consider very satisfactory. W. A——, aged seventy-four, has been subject to ague at times for years; has now been six months under treatment, quinine having been administered in full doses, until he vows he will take no more, as he believes he feels worse after it. Nitro-muriatic acid agreed better. The paroxysms of ague occurred every three or four days, and generally three times a day. As the next would be his bad day, I ordered him to begin the salicin at once (thirty grains every two hours, if awake). Saw him at 4 P.M. next day. Has had only one fit, and that the powder seemed to stop short; feels and looks much better. To take thirty grains every four hours until after his next bad day; if not well then, to continue the medicine until seen again. Visited on the 9th November, 1876. Said he had a slight feeling of chill on the fourth day after beginning the salicin, but yesterday (the 8th) felt as well as he does to-day, and that is better than he has done for six months; in fact, he says his limbs are not so stiff as usual, and he walks much better.

As the last two cases were in the Fen, five miles distant, I could not see them sufficiently often to note with the thermometer the antipyretic effect, or to record the cases in regular hospital form. I think, however, my first case shows salicin to have an almost magical effect in restoring the equilibrium of the circulation, making normal the temperature and checking this troublesome disease; while my last case shows it to be superior to quinine even in cases of genuine ague of old standing in aged patients.

My excuse for bringing the above cases before the profession without further delay is, that I feel perfectly confident we have in salicin a most valuable remedy, especially in all malarious fevers; and that I am in hopes these remarks may encourage my professional brethren resident in those districts where both willow-bark and fever abound to give it a fair trial and the profession the benefit of their experience.

Westgate, Peterborough.

TWO CASES OF CANCER OF THE KIDNEY.

By ANDREW DUNLOP, M.D.

THE case of cancer of the kidney recorded in THE LANCET of Feb. 10th, by Dr. Andrew, recalls to my mind the two following cases in which the disease ran an unusually slow course.

Mrs. G——, aged fifty, first came under my care on Oct. 8th, 1872. Up to ten or twelve years previously she had enjoyed good health, but she then began to suffer from frequent attacks of severe pain in the left lumbar and inguinal regions, accompanied by vomiting and prostration. Hæmaturia, sometimes copious, also occurred from time to time. Five or six years later the attacks began to diminish in frequency and severity, and then they gradually ceased altogether, and with them the hæmaturia disappeared. But at this time a tumour became perceptible in the left lumbar region anteriorly, and this had gone on increasing ever since. From the date of the appearance of the tumour she had continued weak, with night-sweats and frequent vomiting. The urine was often scanty, but there was never anything unusual in its appearance. During the three months previous to her coming under my care she had lost much flesh, and had got rapidly weaker.

Symptoms on Oct. 8th, 1872.—Complexion of a sallow, yellowish tint; tongue clean; appetite small; frequent vomiting; bowels irregular. Somewhat harsh breathing over both lungs posteriorly; slight cough. An indistinct systolic bruit at the apex of the heart; pulse 80, weak. Had ceased menstruating. Urine rather scanty, containing a trace of albumen, and exhibiting under the microscope a few cells of renal epithelium and some urates. On examining the abdomen, a rounded tumour was found occupying part of the inguinal and the lumbar and hypochondriac regions on the left side. Its rounded lower end was felt some two or three inches below the level of the anterior superior spine of the ilium, and thence it extended upwards till it passed under the ribs, which were somewhat pushed outwards by it. By percussion it was ascertained that its upper margin was on a level with the lower end of the sternum. Inwards it extended as far as the middle line. It was painless on pressure, rather elastic to the touch, and here and there obscurely nodulated. The descending colon passed over it, and in the gut could be felt a few scybala.

Progress.—Little alteration took place from the time of her coming under observation until the beginning of December, when severe diarrhœa set in, and she died exhausted on the 11th of the month.

Autopsy, thirty hours after death.—Permission was only given to open the abdomen. On removing the integuments, it was found that the colon, at the junction of its transverse and descending portions, was adherent to the enlarged left kidney, which was also attached to the spleen. On removing the kidney it was found to weigh 82 oz. (5 lb. 2 oz.), and it measured 10½ in. in length, 5½ in. in width, and 16½ in. in circumference. There were one or two large nodules on its surface, and it was so friable at its lower end that a hole was accidentally made in it with the fingers, from which a quantity of yellowish-white pultaceous matter escaped. On section, it was found that not a trace of renal tissue remained, the whole organ being converted into a mass of encephaloid. The upper part was of more consistence, but in the lower third the morbid material had broken down into a pultaceous mass. There was no trace of any calculus. The spleen was small, but perfectly normal. The liver was free from deposit and healthy. The right kidney was normal; some of the mesenteric glands were infiltrated. The uterus was the size of a large orange, and was infiltrated with cancerous (?) material.

Remarks.—From the history, and the long duration of the case, I was at first disposed to think that the early symptoms were caused by the presence of a calculus in the pelvis of the kidney, and that this calculus had become impacted at the top of the ureter, giving rise to pyo-nephrosis, with perhaps the formation of some cheesy matter, and with great enlargement of the organ. This view was strengthened by the somewhat elastic nature of the tumour. Later, however, the rapid wasting and the cachectic hue of the skin led me to conclude that the disease was almost undoubtedly malignant.

Of the second case I can only give a sketch, as, unfortunately, I took few notes, and the post-mortem examination was incomplete. The patient was a male, aged about fifty-five, who first came under my care in April, 1870. He then told me that for the last ten years he had been suffering from frequent attacks of hæmaturia. These attacks came on at irregular intervals, but generally every few months. Sometimes the hæmorrhage was copious, at other times the amount of blood was only sufficient to stain the urine a deep brown colour. The attacks seemed to come on independently of any exertion. On examination I detected a tumour in the right lumbar region. The patient was otherwise well, though he was rather thin and had a somewhat cachectic look. After this I frequently attended him during his attacks of hæmaturia, in some of which the hæmorrhage was very profuse, and lasted for nearly a week. Between the attacks the urine was normal, or contained a little albumen. Meantime the tumour was slowly increasing in size. At last, in 1874, after a severe and prolonged attack, he did not rally as usual, and from that time he steadily lost strength and flesh. By the beginning of 1875 he could not leave his bed; his appetite was lost, his tongue and lips became red and tender, there was occasional slight diarrhœa, his skin was of a yellowish tint, and he was greatly emaciated. There was no further hæmaturia, but the strength continued to ebb away, the muscles wasted to such a degree that he could hardly move his limbs, and at length he died of exhaustion on the 24th August, 1876.

On the following day I was allowed to examine the affected kidney, but the affected kidney only. Its upper end was adherent to the liver. It was 8 in. long, and 4½ in. wide. I had no opportunity of weighing it. Its lower three-fourths, or thereabout, was entirely converted into a rather friable, yellowish-white mass. In the upper fourth there was still some renal tissue remaining. It was of a pale red colour; it was permeated by a certain amount of fibrous tissue, and had scattered throughout it rounded masses of cancerous matter from ¼ in. to ¾ in. in diameter. The amount of renal tissue increased, and the proportion of morbid material gradually diminished, from below upwards. The softer material in the lower three-fourths seemed to be undergoing fatty degeneration. I do not know whether it was anything more than a mere coincidence that the disease was more marked, or apparently of longer standing, in the lower part of the kidney in both these cases.

So far as my own experience goes, and so far as I have been able to ascertain from reported cases, the duration of malignant disease of the kidney is usually of short duration. Of the twenty adult cases alluded to by Roberts, eight died within a year, and seven under three years. Yet out of the twenty, one lived four years, three lived six years, and one seven years. Dr. Andrew's case, where the disease lasted fourteen years, and the two just given, where the duration was from ten to twelve years in the first, and about sixteen years in the second, show that occasionally the progress may be much more slow than is generally supposed, and this is to be remembered when forming a diagnosis in a doubtful case.

Jersey.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL LYING-IN CHARITY.

A CASE OF PLACENTA PRÆVIA; NARROW ESCAPE FROM ASPHYXIA UNDER CHLOROFORM; INTRA-UTERINE RESPIRATION OF THE FŒTUS.

(Under the care of Dr. GALABIN.)

THE fact of the establishment of intra-uterine respiration in the subjoined case has an important medico-legal as well as a clinical bearing. Post-mortem examination showed that the left lung had been sufficiently expanded by air to float in water, although the fœtus had probably died at least three hours before delivery.

For the following notes we are indebted to Mr. J. Brett, M.R.C.S., resident obstetric assistant.

On the afternoon of Feb. 12th, 1877, a woman twenty-five years of age, between the seventh and eighth months of her fourth pregnancy, sent for assistance. Two weeks before she had had a fall on the left side, and the day previous she had received a blow upon the abdomen. All the morning she had been exerting herself in lifting weights, when suddenly, at 1.30 P.M., she felt a sudden gush from the vagina. At least two pints of blood were lost at this time, and the bleeding continued in lesser quantity. None had occurred previously during her pregnancy. The woman fainted from loss of blood, and was lifted into bed. When first seen she had a pulse of 130, extremely weak. No labour pains had commenced; the os was sufficiently dilated to admit one finger; and the edge of the placenta was felt partially occupying the cervical canal. Dr. Galabin was sent for, but was not at home. The membranes were then ruptured, ergot administered, and a watch kept upon the patient. Her condition appeared so hazardous that all

preparations were made for transfusion, in the expectation that this operation might become necessary before delivery could be effected.

Dr. Galabin visited the patient at 7 P.M. She had then somewhat revived, but was extremely blanched, and no uterine contractions whatever had occurred. The cervix was very rigid and at least three inches long; the internal os was dilated enough to admit two fingers, and the external os was somewhat wider. The vertex was presenting, but was very high up, being displaced by the placenta. The placenta was still attached posteriorly up to the margin of the internal os. It was separated by the finger from the lower segment of the uterus for about two inches, according to the method recommended by Dr. Barnes, but, the uterus being perfectly flaccid, the hæmorrhage was not diminished by this means, but rather increased, and the vagina repeatedly became filled with clots. It was then proposed to introduce a hydrostatic dilator into the cervix, but the patient, who was extremely restless and unmanageable, refused to allow any such manipulation without the use of chloroform. In order, therefore, to avoid more than a single administration —since an anæsthetic appeared hazardous in the patient's anæmic state,—it was resolved to perform version if possible. The pulse becoming almost imperceptible before the patient was fully under chloroform, the anæsthetic was changed to ether. She then made a slight effort at vomiting, and was quickly observed to be choking. The jaws were tightly clenched, and could not be forced open till she was apparently dead. The larynx was then cleared by the finger from some vomited matter which obstructed it, and artificial respiration was performed for some minutes, after which natural breathing was restored.

Bipolar version was then performed by Dr. Galabin, the patient being in the dorsal position, and the right hand used internally. The head was already so high that its upper margin was at the level of the umbilicus, and could not be pushed much further by the internal fingers passed through the elongated cervix; it was therefore carried up to the right iliac region by the external hand acting alone, and the left knee was afterwards pushed down within reach of the finger in the cervix. Bleeding was arrested from this time, but the cervix remained too rigid to allow delivery to be completed, although ergot was again administered and traction made upon the leg. The fœtus was then observed to make convulsive movements, and with each movement a gasping sound was heard from the uterus; this was audible at the other extremity of the small room, and upon auscultation had a startling loudness. It was evident that during version air had found its way to the fundus of the uterus, and that the fœtus, becoming asphyxiated from detachment of the placenta, was trying to breathe. The gasping was continued at intervals for about a quarter of an hour. It was impossible to effect extraction quickly, and no attempt was made to supply the fœtus with air through a tube for fear it should obtain entry into the uterine veins. If a double-action cannula had been at hand, it might have been a safe measure to withdraw air by suction through it from the uterus, thus allowing fresh air to supply its place, and keep the fœtus alive until the cervix yielded. About three hours afterwards some uterine contraction commenced, four full doses of ergot having been given. The cervix gradually dilated, strong traction being made upon both legs, and the fœtus was extracted about four hours after the performance of version; it gave no sign of life. An autopsy was made, and it was evident that air had entered the lungs, the greater part of the left lung being sufficiently expanded to float in water. The fact of the intra-uterine respiration of air was thus confirmed. The mother suffered from severe febrile symptoms from the second to the fourth day, the temperature rising to 105° and the pulse to 140; but eventually she made a good recovery.

WEST LONDON HOSPITAL.

CIRRHOSIS OF THE LIVER; ASCITES; HÆMATEMESIS; DEATH BY COMA.

(Under the care of Dr. THOROWGOOD.)

For the following notes we are indebted to Mr. White, house-physician.

Edward W——, aged twelve years, was admitted on March 16th, 1875. The lad was cheerful and intelligent, looked yellow about the eyes, had a clean tongue, quiet pulse, and slight loss of appetite. It was stated that his mother died of some abdominal disease, but that his father was alive and healthy. No history of syphilis or of intemperance was elicited.

On examination the thorax appeared in all respects healthy, but the abdomen was large, and the right lobe of the liver was felt extending downwards full three inches below the ribs when the boy was lying down. The surface of the organ was irregular, pressure caused no pain, and there was no ascites. He took small doses of sulphate of magnesia, with bicarbonate of soda, and on May 4th left the hospital at his own desire.

On Oct. 30th, 1875, he was again admitted with extensive ascites, the abdomen measuring thirty-two inches at level of umbilicus. The cutaneous veins were enlarged, and the hepatic dulness was much as it was in the preceding May. Tongue clean, no sickness, no albumen or bile in urine. Spleen distinctly enlarged. Under treatment with iodide of potassium, nitrate of potash and squill, he improved, and on Dec. 1st he left at his own desire.

On August 22nd, 1876, he again became an in-patient, and stated that he had followed the advice given him to avoid all alcoholic drinks, and had been able to work as a light porter. The abdomen now measured thirty-eight inches and a half at level of umbilicus. On Aug. 25th he was tapped by Mr. Butlin, and four pints and a half of clear yellow fluid drawn off. He bore the operation well. After this tapping enlargement of liver and spleen was very evident. After the removal of the fluid he was given a mixture containing twenty drops of copaiba balsam and of spirits of nitrous ether in peppermint water, three times daily. He did well with this, and there was no reaccumulation of fluid in the abdomen.

After being an out-patient for a few weeks, Dr. Thorowgood again took him into the ward. The liver tumour was not quite three inches below the ribs, and there was but little fluid in the abdomen. On Dec. 23rd, after being four days in the hospital, during which time he was taking nitro-hydrochloric acid and taraxacum, he suddenly vomited much dark blood, not frothy and not acid to test-paper. Once before, while at home, he had done the same thing.

On Dec. 24th he was much better, and in the afternoon he played at draughts, but at 9 P.M. he became very pale, delirious, and violently excited. Mr. White gave him ten drops of tincture of opium, and he became calmer.

Dr. Thorowgood saw him on the afternoon of the 25th. He had then become comatose, face pale, eyes jaundiced, pupils widely dilated, teeth clenched, pulse 124, hepatic region decidedly tender. He remained in this state for twenty-four hours, and then died.

With some difficulty leave was obtained to open the abdomen. When this was done, the liver was found covered with yellow nodules, its structure was easily torn, and yellow bile flowed out. The spleen was enlarged, but not changed in structure; the kidneys were somewhat congested, but otherwise normal; a moderate amount of fluid was found in the cavity of the abdomen.

Dr. Cayley kindly examined a portion of the liver, and found it to contain much fat, with granular matter and undue development of fibrous tissue. The urine, unfortunately, was not examined for crystals of leucine and tyrosine.

Remarks.—The occurrence of so well-marked a case of cirrhosis in a boy aged twelve, of temperate habits, is not common. The very sudden advent of delirium, with grave nervous symptoms leading to coma and death, gave rise to the suspicion that a change of the nature of acute yellow atrophy had been set up in the liver. The probability is that the blood became poisoned by retained cholesterine and biliary matters, hence the gradually increasing coma.

The balsam of copaiba seemed very beneficial, and by its action on the kidneys prevented in some degree reaccumulation of dropsical fluid.

SUSSEX COUNTY HOSPITAL, BRIGHTON.

ANNULAR STRICTURE OF SIGMOID FLEXURE; COLOTOMY.

(Under the care of Dr. WILLIAM KEBBELL.)

THE following notes, together with others which we hope to be able to publish shortly, were recently read before the Brighton Medico-Chirurgical Society.

A. B——, aged twenty-seven, a labourer, was admitted on

Jan. 22nd, 1877. He had had three attacks of constipation since the preceding November, from which he recovered sufficiently to be able to return to his employment.

On admission, the constipation had lasted fifteen days. Croton oil, with enemata, had been administered, the former with much increase in his sufferings. The bowels were enormously distended, attended with occasional severe spasms, when the outline of the intestines was distinctly marked upon the surface of the abdomen. He had an unhealthy cachectic appearance, though in no very marked degree; his countenance was anxious, and indicative of having undergone severe suffering. Had had a good deal of vomiting, which had in a great degree subsided, and now complained much of nausea, though he was able for the most part to retain fluids on the stomach.

There was a small swelling about an inch in diameter, tender to the touch, with a central depression, about three inches above the umbilicus. He had inguinal hernia on both sides, but the openings were large and the bowel easily returned. As the employment of aperients was out of the question, Dr. Kebbell requested Mr. Herbert Smith, the house-surgeon, to put him under the influence of opiates, to examine the rectum with the finger, and to endeavour with the greatest care to pass a flexible tube up the rectum into the colon. On digital examination something hard was felt as high up as the finger could reach, but it was difficult to say whether it consisted of fæces in the colon, or a tumour posterior to the rectum.

Mr. Jowers saw the man that evening, when a flexible tube was passed about eighteen inches up the rectum, and a large quantity of fluid injected.

A consultation on the case was held on the following morning, when all the members of the surgical staff were present. The patient was found much in the same state. The tube was again passed up the rectum without any relief. It was thought that the before-mentioned swelling above the umbilicus, might in some way be the cause of the obstruction. This was cut into, and it proved to be a small omental hernia. The same members of the staff met again in the evening, and found no change in the patient's condition. There had been less suffering, as he had been put under the influence of opium and belladonna.

As the patient could not be in a worse condition, and death was certain if left to himself, it was decided to operate. It was still thought that the omental hernia was in some way or another the cause of the obstruction. He was accordingly put under the influence of chloroform, and the opening above the umbilicus enlarged. The intestines were carefully examined through the opening by Mr. Jowers. No cause of obstruction was discovered in the small intestines, but a movable tumour was felt low down in the abdomen. The wound in the abdomen was accordingly closed, and colotomy successfully performed by Mr. Jowers, when a large quantity of fæces and fluid escaped from the opening.

The patient died the following morning, having never thoroughly rallied from the effects of the operation.

On examination after death, the small intestines were found enormously distended with gas; there was a great deal of fluid in the cavity of the peritoneum, with all the signs of the first stage of peritonitis. No cause of obstruction was found in the small intestines, but on taking out the descending colon with the rectum, an annular stricture was discovered in the sigmoid flexure. The mucous and submucous coats were much thickened, and the peritoneal covering was puckered and contracted in some places. The mucous membrane was covered with cauliflower-looking excrescences, and there was perfect occlusion of the gut. The thickening of the coats averaged nearly three-quarters of an inch. Though hard and nodular generally, there was softening in some places, and through one of these the elastic tube had passed into the cavity of the abdomen. The glands in the neighbourhood were also slightly affected and taking on the same form of disease. The liver contained numerous globular masses of a hard cheesy consistence and yellowish colour, and contained in a distinct investing membrane. Though the groins contained marks of old buboes, there were no signs of any syphilitic taint in the system. Dr. Kebbell thought the lesion was one of the many forms of scirrhus cancer we see developed in the system.

In his remarks, Dr. Kebbell spoke of the unusual difficulty of the case. If the seat of stricture had been within reach of the finger (and the cases are exceptional that are not so) the course would have been clear. Colotomy would have been at once performed, and as the disease was not in an advanced stage, the patient might have existed for many months in tolerable comfort. The omental hernia, which, to say the least, was a remarkable coincidence, served to mislead Dr. Kebbell and his colleagues; as also the double inguinal hernia, where the bowel might have taken on some form of disease, through constant handling or injudicious manipulation. Dr. Kebbell said that this case of obstruction reminded him of another which came under his care at the hospital some years since, but of a very different kind and with far happier results. It was a lad of eighteen years of age, of a healthy appearance, who had had obstruction of the bowels for a week before admission, attended with a tympanitic abdomen, spasmodic pains of the bowels, and constant and slightly stercoraceous vomiting. The case was regarded as one of intussusception, and it was thought better to trust to nature than run the risk of that terrible operation—ventral incision. And the event justified the decision. By means of sedatives, the irritability of the stomach was so far allayed that the lad was able to take food, which he would generally vomit up three hours afterwards. He went on in this way for three weeks, keeping up his strength fairly, when, to the surprise of everyone, his bowels acted naturally, and he left the hospital a few days afterwards quite well. The invaginated portion of intestine had doubtless sloughed, and union had taken place between the adjoining parts.

HOSPITAL FOR WOMEN AND CHILDREN, CORK.

SURGICAL CASES.

(Under the care of Dr. MACNAUGHTON JONES.)

Contraction of the fingers from a burn treated by transplantation.—J. L——, aged two years and a half, was severely burned on the back of the hand and wrist about one year previous to admission. The thumb was bent back, and the first phalanx completely dislocated into the palm of the hand by the cicatrix, which extended from the phalangeal joint to the base of the metacarpal bone. The little finger was bound down to the palm by a dense web.

The cicatrix was freely dissected up, and the tendons of the extensor primi and the extensor secundi internodii policis were divided. The thumb was then reduced and placed well in position, and the little finger was also freed, a piece of round cork was placed in the palm, and the thumb brought across it with adhesive plaster. The little finger was extended on a splint. Some days subsequently four small pieces of skin were transplanted from the child's arm to the raw surface on the back of the thumb. The skin grew well. A splint was afterwards made especially for the hand, and the thumb and little finger were thereby kept in good position, whilst displacement of the former was prevented. The child, before he left hospital, was quite cured, and could do anything with the hand. When last seen he could pick up with his forefinger and thumb a pin off the ground.

Bad case of talipes equino-varus, with old contraction of plantar fascia.—A. L——, aged nine years, operated on previously for talipes, was admitted on Oct. 11th, 1875, with great deformity of the foot. The tarsal bones were partly displaced, and there was considerable contraction of the plantar fascia. From a cast of the foot, sent to Messrs. Matthews Bros., London, a capital modification of Scarpa's shoe was made. The treatment consisted in first dividing the tibialis posticus and tibialis anticus muscles, and the plantar fascia freely where it was contracted. Subsequently the tendo Achillis was severed. The foot having been kept in ordinary club splints for some time was finally placed in the Scarpa shoe, and the case was watched daily. The child was sent out of hospital in May, 1876, with a most useful foot, and very little deformity, the foot being placed well on the ground. The child has been since seen, and a drawing was made. The foot was quite straight, and the boy had no inconvenience.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

THE ordinary meeting of this Society was held on the 17th inst., the President, Dr. Murchison, in the chair. The evening was occupied chiefly by two valuable communications from Dr. Klein, illustrated by a series of histological preparations. They dealt with the minute anatomy of scarlet fever and of the disease known as typhoid in the pig. Specimens were also exhibited by Dr. Braidwood, of Birkenhead, illustrative of his researches into the changes in the skin in vaccinia and variola. The time occupied in the exposition of these subjects prevented any prolonged discussion. Before the adjournment, the President announced that in addition to the exhibition of specimens by members, at the next meeting a paper would be read by Dr. Creighton, of Cambridge, on the Etiology of Cancer.

Dr. KLEIN, who exhibited a series of specimens illustrating the Minute Anatomy of Scarlatina, said that this and the subject which he was also going to bring forward that evening had formed matter of investigation under the direction of the medical officer of the Local Government Board, and would shortly be published in detail in that officer's report. The research was based upon the examination of a series of twenty-three cases of scarlet fever dying at periods of the disease varying from the second to the forty-fourth day; and Dr. Klein acknowledged his indebtedness to Dr. Murphy, of the London Fever Hospital, for the opportunity afforded him of making his examinations. The facts accruing from this research were for the most part novel, and embraced the minute changes occurring in the kidney, liver, spleen, lymphatic glands, and throat. The subjects were mostly children; the earliest example—viz., that of death on the second day, being in a child six years of age; but the case of death on the forty-fourth day was that of an adult who succumbed to pneumonia whilst convalescing from scarlet fever. The ages varied between two and twelve years; one was eighteen years, another twenty-eight, and one thirty-six years of age. Dr. Klein then proceeded to describe the changes that were found in each organ seriatim. 1st. *Kidney:* The earlier changes are mainly limited to the vascular apparatus. They comprise—(*a*) An increased nuclear proliferation of the epithelium of the glomeruli of the Malpighian corpuscles. (*b*) Hyaline degeneration of the afferent arteries, commencing beneath the intima, which in places is swollen into spindle-shaped masses. Similar hyaline degeneration of the capillaries of the Malpighian tuft, leading to impermeability of the glomerulus, and final fibrous change. This hyaline change occurs very early; it was met with in the case fatal after two days of the fever. (*c*) Multiplication of the nuclei of the muscular coat in varying degrees in different parts of numerous arterioles, and most marked in the arteries at their entrance into the Malpighian corpuscles. (*d*) The condition known as "parenchymatous nephritis," shown by swelling of the tubules, with granular condition of their epithelium, and accumulations of granular material and even blood within the cavity of Bowman's capsules, and in some of the urinary tubules. Such changes have been described by most writers on acute scarlatinal nephritis, as Simon, Johnson, Dickinson, Fenwick, and others. The arterial changes were allied in nature to the hyalin-fibroid change described by Drs. Gull and Sutton in chronic Bright's disease, and similar hyaline material had been described by Niilsen in the arterioles and capillaries of the pia mater, and that observer had noticed it to be most marked at the points of division of the vessels, and believed it to consist in a substance allied chemically to elastic tissue, a view favoured by the fact that the intima is the part first affected. Gull and Sutton's observations show that in chronic Bright's disease the elastic layers in the outer coat are the chief seat of the change. Dr. Klein had found like alterations to those met with in the scarlatinal kidney in the arteries of the intestine in typhoid fever. There was no doubt as to the increase in the muscle-nuclei in the arterioles; their transverse disposition also told against this appearance being due to the proliferation of the epithelial nuclei, which have a longitudinal arrangement; and there was no evidence in favour of their being the nuclei of lymphoid cells which had immigrated into the arterial wall. Admitting, then, the fact of the proliferation of the muscular nuclei, could this, Dr. Klein asked, be considered to be a state of real hypertrophy? Against the assumption that it was a true hypertrophy was its occurrence in the very early stages of the disease. Nor could it be thought that the arterioles were hypertrophied in consequence of the increased resistance to the blood-flow in the degenerated arterioles; for the degenerative changes involved only a very small number of arterioles. Hence he was inclined to believe that the germination of the muscular nuclei was a phenomenon concomitant with the degenerative hyaline changes, and due to the operation of the same agent. Klebs had attributed the fatal result in patients dying in the early stages of scarlet fever with symptoms of anuria, to what he styles "glomerulo-nephritis." He describes the kidneys as being firm and hyperæmic, the glomeruli appearing as small, pale, white dots, often with no accompanying change in the tubules, or only slight catarrhal changes. The whole of the affected glomeruli are the seats of extensive nuclear proliferation. Dr. Klein has observed this nuclear growth in the glomeruli; but it is not a constant feature, by no means so constant as the arterial changes to which he thought the suppression of urine was more probably related. Lastly, the cloudy swelling of the tubular epithelium in these early stages is but slight, and is limited to small parts of the kidney. Other changes are met with in the kidney examined later than the first week of the fever—namely, about the ninth or tenth day. Of these the most marked is an interstitial infiltration of round cells or lymphoid cells. This infiltration begins amid the larger secreting tubules, and spreads into the bases of the pyramids; it rapidly advances, so that the greater portion of the cortex becomes the seat of a quantity of round-cell tissue. The infiltration, starting at the roots of the interlobular vessels, is at first limited to the interstitial tissue and the medullary rays, and finally leads to degeneration. In some cases definite adenoid or lymphoid tissue is found. The urinary tubules are more swollen than at first, and are blocked by lymphoid cells. In one specimen (from a child dying on the thirteenth day), the interstitial infiltration was extreme, and distributed in foci. It was associated with emboli in some of the arteries; the emboli consisting chiefly of fibrin entangling a few cells. From the nature and distribution of the interstitial inflammation in this case it was probable that the embolism stood in causal relation to it. The amount and intensity of parenchymatous change appeared to depend upon the interstitial. Dr. Klein remarked that the fact of interstitial nephritis had been hitherto described as only a rare condition in scarlatinal nephritis. Isolated cases had been furnished by Biermer, Coats, Wagner, and others; but he himself thought it was a constant and essential lesion, occurring, as a general rule, after the fever had lasted nine or ten days.—2. *Lymphatic Glands:* The changes described embraced the lymphatic follicles at the root of the tongue, in the pharynx and larynx, the tonsils, as well as the cervical chain of glands. In addition to inflammatory swelling and multiplication of the lymphoid nuclei, there were parts in which these were replaced by large granular "giant-cells" containing several nuclei; and in the cervical glands a hyaline change in the vessels and larger cells was observed. —3. *Liver:* This was slightly enlarged. There was granular opaque swelling of the hepatic cells; changes in the interior of some of the arteries similar to those met with in the kidney; thickening of the connective of Glisson's capsule from the accumulation of round-cells, especially around the bile-ducts and the bloodvessels. These changes were well marked in the two-days case.—4. *Spleen:* Enlargement of the Malpighian corpuscles, the central portions of which were partly degenerated, and sometimes found to contain large cells containing yellowish pigment. Around the central degenerated area two series of cell-groups, staining with different intensity, could be made out. There was

also hyaline degeneration of the intima of the arteries, multiplication of the muscle-nuclei of their walls, and hyaline swelling and degeneration of the adenoid tissue. In conclusion, Dr. Klein stated that in addition to the hyaline swelling of the exterior of the arteries, he had found a similar change to occur in the basement membrane of the trachea and in the vocal cords (in one case). This fact was of interest in a chemical sense, seeing that elastic tissue is of all tissues least susceptible of being acted on by chemical reagents.—The PRESIDENT, in thanking Dr. Klein for his very interesting communication, observed that the changes he had described were especially valuable as bearing upon the vascular lesions in chronic Bright's disease described at recent meetings by Sir William Gull, Dr. Sutton, and Dr. Johnson. For Dr. Klein's researches seem to show that changes which we are accustomed to regard as met with in purely degenerative disease of the kidney took place prior to the occurrence of any marked, or but little marked, structural glandular lesions. From a practical point of view, he would like to ask Dr. Klein whether in cases of recovery from scarlet fever these arterial changes disappear completely, and, if so, in what manner? He would also ask Dr. Klein whether his observations had led him to throw any light upon the circumstance of the comparatively late appearance of albumen in the urine following scarlatina (namely, about the third or fourth week), this albuminuria being frequently the first symptom of what is frequently serious disease of the kidney. —Dr. GREENFIELD said that the thanks of the Society were due to Dr. Klein for demonstrating the true nature of scarlatinal nephritis. For the last four years he had himself been engaged upon an examination of the renal lesions in scarlet fever, and had come to conclusions in favour of there being in most cases marked interstitial change. The first case he had met with was that of a lad, who a year after suffering from slight albuminuria, sore-throat, and a fever thought to be typhoid, was admitted into St. Thomas's Hospital with acute Bright's disease. After death the change found was one almost entirely of acute interstitial nephritis. About three years ago M. Charcot had also come to the conclusion, from examination of specimens in various stages, that interstitial nephritis, occurring primarily around the glomeruli, was the essential feature of the scarlatinal kidney. At the same time Dr. Greenfield confessed that in some cases he had only found parenchymatous changes. He concurred in the fact of the infiltration of Glisson's capsule in the liver; which organ he had frequently noticed to be firm and indurated in scarlet fever. He was sceptical as to the swelling of the intima of the arteries in the spleen in all cases, and as regarded the lymphatic glands and follicles, he had seen similar changes to those described by Dr. Klein in diphtheria. These changes are not in any sense specific, but simply the results of ordinary inflammation in the various regions affected.—Dr. MOXON confessed that the changes described by Dr. Klein were new to himself, and he accounted for this by supposing that the field of pathological experience falling to his lot included but few cases so early in the disease as Dr. Klein had to deal with. He himself had usually before him the large mottled or congested kidney. He did not remember ever having hit upon the points described, although he had examined very many such kidneys. He did not say that he had never seen crowds of corpuscles massed around Malpighian tufts, but he was not accustomed to regard that as an acute change. It was possible that we had here the pathological explanation of the clinical diversity between Bright's disease from scarlet fever and Bright's disease arising from other causes, as cold, &c. Whatever that difference might be, it was yet evident that in the latter the acute changes seemed to pass into a chronic condition more readily than they did in the former. In ordinary so-called "tubal" nephritis he had never seen an amount of exudative material sufficient to warrant the belief that there was an interstitial inflammatory change also present. Possibly the lesions distinctive of acute disorder had passed off before such kidneys were examined. He would ask Dr. Klein how he was enabled to identify the embolus he described in one of the cases as distinct from a plug of fibrine forming in the vessel from the impeded circulation.—Dr. KLEIN, in replying to Dr. Murchison's queries, said that in the one case examined on the forty-fourth day, in which death was due to acute pneumonia, from the onset the parenchymatous and interstitial changes were very slight; and he could not but conclude that this case would have recovered completely from the renal lesion. He thought the absence of albumen in the urine in the earlier periods of the fever might be explained by a fact he had observed in cases where no albuminuria was present, and yet the renal changes were very marked and many of the tubules were full of casts. He was gratified to hear from Dr. Greenfield that he had also found interstitial nephritis in scarlet fever. He could quite believe that in some cases no interstitial change should be found, which begins as a slight accumulation of round cells in the connective tissue and around the vessels; and the interstitial nephritis may only be fully developed in some of the fatal cases. He had described the arterial plug as embolic on account of its position in the vessel at a point of its giving off a branch, and the fact that the artery was full of blood behind the plug and empty beyond it.

Dr. KLEIN then read a paper upon the "Nature of the so-called Pig-typhoid." He referred to a recent careful description of this disease by Prof. Axe, of the Royal Veterinary College, who believes, with Dr. Budd, that the disease is really the representative in the pig of the typhoid fever of man. Some years ago, however, Dr. Murchison expressed grave doubts as to the truth of this comparison, the intestinal lesions in the pig having a different seat from those in man. Dr. Klein then proceeded to give an outline of the symptomatology of the disease in question. It is extremely infectious, and has an incubation period varying from three to fourteen days, when it sets in with evidences of severe fever. The skin is swollen, reddened, and presents an eruption which Prof. Axe regards as the true typhoid eruption. Its appearance is preceded by a rise in temperature, and it consists in a number of small, slightly raised, rounded or accuminated spots, disappearing on pressure and occurring in crops. As it fades it is followed by desquamation, and if the fever be intense, by a vesicular eruption. The animal becomes very prostrate at an early period in the disease, and there is sometimes constipation, at other times diarrhœa. In the latter case the stools are thin and watery. The abdomen is very tender. The mortality is high—viz., 85 to 90 per cent. of the animals attacked. The number examined after death by Dr. Klein was twelve. The *skin* was of a diffuse red colour, and swollen in the affected parts, chiefly the groins, neck, and lobes of the ears. In two cases there was no distinct blush, and in one the skin presented patches of necrosis. The *intestines* were hyperæmic, and in some cases ecchymosed. The changes are most marked in the large intestine, there being marked ulceration, especially in the vicinity of the ileo-cæcal valve. In the cæcum the ulcers were confluent, and measured several inches. The ulcers are totally distinct from those of human typhoid, and have no relation to the lymphatic follicles. The *mesenteric, mediastinal,* and *submaxillary* lymphatic glands are red and vascular, and frequently the seat of hæmorrhages; in that the disease resembles "anthrax," with which it is confounded by Continental writers. The *lungs* present tracts of grey hepatisation, mapped out by œdema of the interlobular tissue; in places a bronchial tube is filled with white cheesy masses, and the whole lobule supplied by it is transformed into a hard, dry, and friable mass. There is pleuritis over the affected portion of lung, with varying amount of exudation. In some cases there is pericarditis, or peritonitis. The *spleen* is dark and enlarged, in one case presenting some white nodular structures. The *liver* is large and full of blood, and the kidneys hyperæmic, and presenting hæmorrhagic spots in their cortices. Thus the organs most commonly affected are the skin, large intestine, lymphatic glands, and lungs. Microscopical examination of the affected intestine showed the capillary bloodvessels to be full of blood, and the ulceration to be due to a necrosis and disintegration of the superficial parts of the mucosa, not extending below the muscularis mucosæ. Large multinuclear giant cells occur in the spaces around the crypts of Lieberkühn, and in some cases the mesenteric glands contained well-developed giant-cells. The lungs showed the presence of lobular pneumonia. The liver showed increase in the interlobular connective tissue, with, in the more advanced cases accumulation of lymphoid cells in the acini. Passing then to sketch the results of his experimental investigation of the affection, Dr. Klein stated that Professor Axe believed the

infection to be conveyed in the air, and that the skin was the seat of the contagion. That the contagion was also present in the bowels had been tacitly assumed, and he had injected beneath the skin of a healthy animal some of the material obtained by scraping the diseased bowel, and had thus obtained the disease by inoculation. But simply feeding the animal on the material did not produce the disease, except in one case, which was explained on the hypothesis that the virus had gained entrance through abrasions in the mouth. The spleen also contains the virus, but not so the blood and juice of the lymphatic glands, a fact against the idea of the affection being allied to anthrax. Possibly the blood in the earlier stages contains the virus.—The PRESIDENT said that ten years ago he brought the subject of pig-typhoid before the Society. The conclusion to which he then came was that the disease had no points in common with the typhoid of man, and he based that conclusion mainly upon the fact that in pig-typhoid the intestinal lesions do not affect Peyer's patches. In none of the cases (seven in number) he examined did he see a cutaneous eruption resembling that of typhoid fever, and the point mentioned by Dr. Klein as to copious desquamation was also a notable difference. In many features the eruption resembled that of scarlet fever—so much so that in some parts of the country the disease had received the name of "red soldier." Dr. Murchison showed a drawing of the eruption illustrative of this. Dr. Klein's researches were of great value; and the more knowledge we have of these and allied diseases in the lower animals, the more insight should we get into similar affections in the human subject. He invited Prof. AXE—who, he was informed, was present—to make some remarks upon the subject.—Prof. AXE regretted that he was not aware that the subject was going to be brought forward until a late hour; and it was of such interest, and Dr. Klein's research was so extended, that it required more time than was at his disposal that evening to do it full justice. He hoped, however, to have at some future time an opportunity for fully stating his views. He regarded the question in a broader light than Dr. Klein, and was not disposed to consider it simply as a matter of morbid anatomy. He certainly favoured the view held by Dr. Budd, that it is the counterpart in the pig of human typhoid.—The PRESIDENT said that the Society would at any time be most happy to receive a communication on the subject from Prof. Axe.

Dr. BRAIDWOOD (of Birkenhead) gave an account of the researches undertaken by Mr. Vacher and himself into the Intimate Pathology of Contagion, the paper being illustrated by a large number of specimens and drawings of sections through the skin of vaccinated and variolous subjects, at different dates in the diseases. With regard to vaccination the local changes were examined in the heifer and in man, and were seen to affect the rete mucosum and hair follicles, consisting in an infiltration of the tissue with round and oval nucleated cells. As the pocks develop, these corpuscles can be seen in the crypts or hair follicles budding or throwing off minute, round, highly refractive bodies. During the later stages, when the pock has nearly matured, these corpuscles elongate into fibres or shrink up, and finally the hair follicles and glands are destroyed. In none of their preparations had the authors observed any bacteria, fungi, or allied organisms. In human skin similar changes occur, the main difference depending on the lesser subcorial connexion in man affording more space for the development of cavities or reservoirs for lymph. In variola there was similar evidence of the contagium "affecting the rete Malpighii and corium, inducing therein a corpuscular infiltration leading to the formation of vacuoles which separate the two layers, destroying the capillary and glandular elements of the true skin, and reproducing the contagium-particles by gemmation. The only point of difference in the process manifested by the two diseases is the more pronounced character of the local changes characterising variola." Their research also led them to test the value of so-called germicides, and the effect of temperature upon the vaccine virus; but for these and other matters contained in this painstaking and laborious investigation we must refer to their reports presented to the British Medical Association, and already published.

The Society then adjourned.

CLINICAL SOCIETY OF LONDON.

THE meeting of this Society, held on April 13th, George Callender, Esq., F.R.C.S., President, in the chair, was occupied with the subject of the excision of portions of bones for disease or tumour, important cases being brought forward by Mr. Heath, Mr. Lucas, and Mr. Morris.

Mr. CHRISTOPHER HEATH read a case of Subperiosteal Resection of the Shaft of the Tibia, occurring in a boy of ten years, who had been kicked on the leg a month before admission. The shaft of the tibia was found to be bare and separated from the epiphysis at both ends, and was removed in May, 1876, by separating the periosteum with the handle of the scalpel. The whole of the shaft was not removed, the back part having new bone adherent to it. The patient made a good recovery, and left the hospital with an open sinus, but able to walk without assistance, and at that time the length of the limb was the same as that of the opposite side. (The patient was shown to the meeting.) There is now a quarter of an inch difference in length of the limbs, due to growth of the sound limb. Mr. Heath referred to a similar case recorded by Mr. Holmes, and recommended the proceeding in appropriate cases, pointing out the necessity for obviating shortening by maintaining the full length of the limb by the use of a splint during healing.—Mr. HOWARD MARSH related the particulars of a case in which he had removed a portion of the femur, including the whole thickness of the bone, and extending from the lower epiphysis to the lesser trochanter. The patient, a boy aged nine, had been attacked a month before with diffuse periostitis of the bone, with the formation of a large sub-periosteal abscess, and was at the time of the operation in so exhausted a state from profuse suppuration that there was a question whether amputation should not be performed. The piece removed was seven and a half inches long. A new shaft was rapidly produced, and the limb was shortened only three-quarters of an inch. The boy left the hospital with all the parts soundly healed. Mr. Vincent, formerly surgeon to St. Bartholomew's Hospital, had published a case in which he removed the whole bulk of the femur, from the trochanter to the lower epiphysis, in a child four years old, who had had subperiosteal abscess. Here also a new shaft was quickly developed, with scarcely any shortening. Mr. Marsh stated that he had seen several cases in which, although, in consequence of acute subperiosteal abscess, large surfaces of the long bones, the femur and tibia, had been completely stripped of their periosteum, this membrane, when matter was let out, had settled down again and become adherent, so that no necrosis had occurred, and Sir James Paget had mentioned to him that he had had several similar cases. Two or three years ago a case—that of a girl, aged about six—was admitted into the Children's Hospital, in which a large abscess had formed around the ends of a fracture of the femur, that had been overlooked. When the abscess was opened, the ends of the bones were found bare for a considerable distance, yet the fracture speedily united when the limb was kept at rest, and no necrosis took place. All these cases, and others like them that he had seen, made him quite sure that the periosteum of the long bones in children, after it has been stripped off by diffuse suppuration, may settle down and become reattached, and that no necrosis may take place.—Mr. RICHARD BARWELL mentioned a case in which he had removed the whole shaft of the tibia. In another case he had removed two-thirds of the shaft. Many cases are on record where, on letting out matter from beneath the periosteum, the membrane subsides and the abscess is cured. As an instance, he narrated the case of a man, sixty-seven years of age, in which part of the posterior surface of the shaft of the femur was laid bare, and some carious pieces of bone had to be removed by a gouge. As to the question of waiting for distinct evidence of separation of the necrosed bone, he believed that it was undesirable to do so; the living texture might be divided without injury.

Necrosed bone might, he thought, be distinguished from living bone by the difference in the note on striking it, living sounding with a dull, dead with a musical, note.—Mr. BRYANT observed that it was an important question when to interfere after acute periostitis or necrosis. It would have been satisfactory to have seen a section of the bone in Mr. Heath's case, in order to judge how long it would have lived. It was impossible to tell beforehand how much of the bone would live. He had tried early separation of the necrosed bone. In one case of acute periostitis of the femur, on opening the abscess the whole bone appeared to be denuded and separated from its periosteal connexions. The constitutional symptoms, before severe, disappeared on opening the abscess. It was decided to remove the bone, which was therefore divided with a chain saw, and he was then surprised to see that the greater part of the bone was very vascular, and that only the superficial part was likely to die. He therefore adjusted the fragments and left it. Callus was formed around it, and new bone was produced, only a small shell coming away. In this case, if he had interfered more actively, he would have taken away viable bone. He mentioned also an analogous case where the tibia and fibula were similarly affected, and where a similar result ensued. Hence he believed it to be sounder practice not to take away bone until it was necrosed, but merely to make free incisions down to it.—Mr. HEATH inquired if the bone in Mr. Bryant's case was separated from the epiphysis.—Mr. BRYANT, in reply, said that the bone in the case first mentioned was quite loose; the section was made only to facilitate removal. In the second case the junction with the epiphysis could not be seen.—Mr. CROFT inquired why Mr. Heath designated the operation *subperiosteal*, seeing that all such cases are necessarily so; and no one in his senses would think of cutting away periosteum to remove bone. He could confirm the observation as to the recovery of bone which was apparently dead: he had seen in the case of bones which were largely exposed complete recovery with no loss of bone.—The PRESIDENT observed that Mr. Heath's case brought up the point, to which he had drawn attention in his introductory address, of the asymmetry of sound limbs, and the differences which had been observed in the Pennsylvania Hospital between the length of healthy limbs on the two sides led him again to refer to it, in the hope that some further observations might be made in this country.—Mr. BARWELL remarked that he had some time ago drawn attention to this fact, and in his work on Curvature of the Spine had shown that some curvatures were due to such asymmetry of the lower limbs.—Mr. HEATH, in reply to Mr. Croft, read an extract from Mr. Holmes's work on Surgery with reference to the title "subperiosteal," which agreed with his use of the term. He agreed with Mr. Bryant that some of the bone might have recovered, but the patient suffered from rubbing of the end of the diaphysis against the epiphysis. He had never performed the operation before, and was not enamoured of it; but it was justifiable when, as in this case, the bone was loose at both ends. The event justified the operation, the boy walking fairly well now (one year after the operation), a result which would hardly have occurred under any other mode of treatment.

Mr. CLEMENT LUCAS exhibited a patient from whom he had removed the lower half of the left ulna on account of a myeloid tumour which had commenced in the interior of the bone. The case was of interest from the rare occurrence of myeloid disease in that situation, and still more from the very serviceable limb which remained after the operation. Mr. Lucas referred to some analogous cases, and stated that he had been unable to find any recorded case in which the lower end of the ulna had been removed for a tumour involving that bone. Mr. Lucas's patient was a healthy-looking married woman, who was admitted into Guy's Hospital on August 11th, 1876. About nine or ten months before admission she had first noticed a slight swelling at the lower third of the left ulna; this was accompanied by a gnawing pain, and gradually increased in size. She sought advice in April (1876) at another hospital, where she was admitted as an in-patient, but left in consequence of amputation being suggested. When admitted into Guy's Hospital in August, there was found a firm, dense, elastic swelling, occupying the lower half of the left forearm on the ulnar side, extending about two and a half inches above the wrist-joint. The surface was smooth and convex, and the skin not adherent except over a small cicatrix. The tumour was not painful on pressure, and the glands above were not enlarged. The movements of the wrist were perfectly free, but pronation and supination were somewhat interfered with. On August 15th, chloroform having been administered, Mr. Lucas made a longitudinal incision about four inches in length on the inner side of the forearm, so as to expose the tumour between the flexor and extensor carpi ulnaris muscles. In so doing the posterior branch of the ulnar nerve was exposed and divided. The muscles and skin were now retracted to the sides, and the bone exposed above the level of the tumour. In order to clear the bone above the wound it became necessary to make a short transverse incision at the upper part of the wound. A blunt knife was then passed between the radius and ulna, and the latter bone divided with a saw. The further steps of the operation presented no difficulty, and the triangular fibro-cartilage and the wrist joint were left intact. The operation was not performed antiseptically, but carbolic dressings were afterwards employed. Very little constitutional disturbance followed, and the patient left the hospital four weeks after the operation, the upper part of the wound having united, and the lower part having closed by granulations. Microscopical examination showed the tumour to be a characteristic myeloid growth. The patient has now free use of her hand, and the movements of pronation and supination are perfect. There is no tendency of the hand to drop towards the ulnar side. Mr. Lucas remarked that in this respect excision of the ulna contrasts favourably with that of the radius, in removal or absence of the latter bone abduction of the hand being an invariable consequence. Excision of the lower end of the ulna did not, moreover, necessarily interfere with pronation and supination, nor was the wrist-joint necessarily opened. He looked upon the operation, therefore, as a most simple one, involving injury to no structure of importance, and yielding a most satisfactory result. He therefore strongly urged its adoption for the removal of growths involving the lower end of that bone in preference to amputation.

Mr. HENRY MORRIS read a paper "On a Case of Myeloid Sarcoma of the Left Radius," in which the lower ends of the radius and ulna were excised, leaving a useful hand. The patient applied at the cancer out-patient department of the Middlesex Hospital on Jan. 3rd, 1876, with a large tumour just above the left wrist, the result of a fall upon her hand. When she first came to the hospital, thirteen months after the fall, and ten months after the commencement of the swelling, the lower end of the left radius was expanded into a large rounded tumour. The inner surface of the ulna was quite free, and could be traced down to the styloid process, but its radial border was overlapped by the expanded radius on both the flexor and extensor aspects. She was advised to come into the hospital for operation, but this she flatly refused to do, and added that nothing would induce her to have her hand amputated. At last she was admitted, and on March 8th chloroform having been administered, and Esmarch's bandage applied to the hand and forearm, a long incision was made over the outer side of the radius, extending from the styloid process to the upper third of the bone. The radial nerve was looked for, and used as a guide to the interval between the supinator longus and extensor carpi radialis longior muscles, as Mr. Morris had previously satisfied himself that he could most readily separate the soft structures from the front and back of the radius by going between those muscles, and keeping the supinator to the forepart of the incision. The supinator longus and the pronator radii teres, at their insertions, were detached from the radius, and the bone, when freed both in front and behind of its muscles, was sawn through at the lower edge of the supinator brevis by a chain saw. The saw was passed through the interosseous membrane upon a piece of silk threaded through a nævus needle. A second longitudinal incision, of less extent than the first, was made along the inner side of the ulna from the wrist-joint upwards, and through it the rest of the soft structures were separated from the tumour and from the lower part of the ulna. The ulna was divided by the chain saw between three and four inches above the wrist, and the lower ends of both bones of the forearm were disarticulated by opening the wrist-joint on the inner side. This done, the entire tumour, together with the ulna and the pronator quadratus

muscle, which was thinly and tightly spread out over the tumour, were removed *en masse*. In the operation the anterior interosseous artery was necessarily divided above the upper border of the pronator quadratus, but with this exception none of the trunk vessels or their larger branches were injured. On removing Esmarch's bandage, several bleeding points had to be tied or twisted, the most noticeable of which was a small branch from the radial, winding round to the back of the radius, which had been divided close to its origin. A branch of the radial artery was divided, and bled as furiously as could the radial itself. All hæmorrhage was, however, soon stopped; the wound was washed out with carbolic lotion, carbolised catgut sutures were inserted, and lint soaked in carbolic oil was placed over the incisions. The hand and forearm were enveloped in antiseptic gauze, and lightly bandaged upon a straight splint. When examined, after removal, the tumour proved to be of a typical myeloid character. It was confined within the radius, which formed a thin and imperfect shell, on the dorsal surface of which were seen the grooves and markings of the extensor tendons. The ulna was firmly attached to the tumour, partly by the pronator quadratus, and partly by adhesions between the periosteum of the ulna and the capsule of the tumour. The patient did uninterruptedly well. After leaving the hospital on April 27th, the woman, who was very apathetic and indifferent about her condition, rarely attended without being sent for. At the end of August she came, and had a light leathern splint moulded to the forearm and carpal part of hand. When out of the splint her hand still hung down loosely like a flail, but she was now able to raise it to a level with the back of the forearm, and to keep it so for a little while. She could make the thumb approach the tip of each finger, but could only make it touch that of the index-finger. The hand was somewhat retracted, so that the carpus had approached the ends of the radius and ulna, the ulna now being only one inch, and the radius about three inches, from the carpus. The hand inclined towards the radial border of the forearm when the arm was resting on a table, as well as when she made an effort to move the hand from its dangling attitude. It could, however, be brought straight, and kept so on a flat surface. Both radial and ulnar arteries pulsated naturally. Sensation of the whole hand, as tested by the point of a pencil, was good. On applying the faradaic current it was found that with a battery of two pint Leclanché cells, and Stohrer's coil, No. 3 power excited a slight movement, and provoked a low cry from the patient each time the circuit was completed by applying one pole on the forearm near the elbow and the other at some part of one of the fingers or of the thumb. The most marked effect was produced when the positive sponge was placed upon the ring finger. She is very thankful she did not have her hand removed, as she finds it very useful. On the 11th January, 1877, she was seen for the last time. She was still wearing the same splint, and with it on could move her thumb and each of her fingers fairly well; she was able to pick up a pin, and could hold a fork. She had been using the hand a good deal for washing, holding the wet linen in the left, while she wrung it dry with the right hand. — Mr. GOULD mentioned a somewhat similar case which was under the care of Mr. Berkeley Hill in University College Hospital, where a small round-celled sarcoma involved the lower end of the ulna. The lower half of the ulna was removed; the wound healed slowly, but the case went on well, and a useful hand resulted.—Mr. BRYANT thought the cases good illustrations of the value of conservative surgery. The old rule in dealing with tumours of long bones was to remove the limb at the joint next above the part affected. Sir J. Paget had done good service in recommending the removal of the bone only when the tumours were non-malignant. In the case of myeloid tumours this rule should always be followed, as they rarely recur. He mentioned the case of a child suffering from myeloid tumour of the upper jaw. The whole of the tumour and a piece of the bone were removed; but, on microscopic examination, the section of the bone at the point of removal showed infiltration of the tumour elements, many of which must have been left. Ultimately, however, the thickened bone became absorbed, and three or four years later the child was quite well.—Dr. ALTHAUS inquired whether the nerve was simply divided in Mr. Lucas's case, or a piece cut out. He mentioned that bleeding such as Mr. Lucas described from a branch of the radial on the removal of Esmarch's bandage, might be completely stopped by the application of a faradic current to the upper and lower parts of the wound. —Mr. LUCAS said that the nerve was exposed for a considerable distance, and a piece three inches in length removed; but sensation, notwithstanding, returned.—Mr. HOWARD MARSH observed that it would be a dangerous doctrine to hold that myeloid tumours do not recur.—Mr. BRYANT agreed that no law could be laid down, but his case showed that they are not necessarily malignant, and may be partly absorbed.—The PRESIDENT observed that it was interesting to note that the operation for removal of the upper jaw-bone sprang from that of gouging out growths from the antrum, also the long period which elapsed before the adoption of this operation.—Mr. MORRIS, in reply, observed that it was well known that myeloid sarcomas, though they might be malignant, were the least likely to recur of any. Paget had given cases showing this, and Merkel's work on disease of bone might also be referred to for similar instances. He questioned whether the plan suggested by Dr. Althaus would be successful on arteries so large as the radial.—Dr. ALTHAUS, in reply, stated that complete temporary occlusion would be produced by contraction of the muscular coat.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting of this Society on April 4th (Dr. West, President, in the chair) the following gentlemen were elected fellows of the Society: M. McWilliam Bradley, M.B., Jarrow-on-Tyne; Wm. Eddowes, M.R.C.S., Shrewsbury; H. W. Maunsell, M.D., Melbourne; Robert Ostler, M.B.; Richard Paramore, M.R.C.S.; and Wm. Wigmore, M.R.C.S.

Dr. ASHBURTON THOMPSON introduced two children the subjects of deformities. In the first was a supernumerary pair of mammæ and a scar-like mark on the top of the head. In the second was observed, in the median line, a little above the upper end of the sternum, a small pedunculated growth, immediately below the pedicle of which was situated a small orifice leading into a short canal lined by mucous membrane.

Dr. BOZEMAN exhibited his instruments for the operations for Atresia Vaginæ and Vesico-vaginal Fistula. He began to treat these conditions in 1855. He first treated the atresia on principles similar to those adopted in the treatment of stricture of the urethra—dilatation and division. He advocated the use of the button suture. He recommended dilatation of the vagina in all cases of difficulty. He employed dilators of hard and soft material: the former were made of vulcanite; the latter of sponge covered with oiled silk. Dr. Bozeman also showed a model of his chair for operating in the knee-elbow position.

The report of the sub-committee on Dr. Palfrey's specimen of a two-headed monster was read.

Dr. S. PLAYFAIR read a paper "On Fibroid Tumour complicating Delivery." The paper consisted of the relation of three cases in which this complication was present. In the first case the presence of a fibroid tumour was recognised before marriage; it was so large as to fill the pelvis. Dr. Farre had succeeded in pushing it out of the pelvis into the abdominal cavity. Pregnancy was accompanied by much suffering, but delivery took place naturally. No hæmorrhage followed, and the tumour, which immediately after delivery reached a foot above the pubes, had, six months after, diminished in size so that it could be discovered only by the bimanual method of examination. A second labour took place naturally. In the second case there were two large fibroid tumours situated at the fundus and sides of the uterus. The pains became feeble, and the forceps was resorted to. There was no post-partum hæmorrhage; six months afterwards the presence of the fibroids could with difficulty be detected. The third case was a multipara. Labour had begun, and a large fibroid was discovered filling the pelvis, jammed down in front of the fœtal head. It had a diffuse broad base, growing apparently from the posterior wall of the uterus. The mass could not be removed

by enucleation or the écraseur, and the space between it and the pubes was only an inch and three-quarters. The hand was introduced into the vagina, and pressure made on the tumour, with a view to push it up out of the pelvis. Eventually this object was attained, and the forceps was applied to the head, and delivery rapidly effected. No hæmorrhage followed. This was a case unsuited for enucleation on account of the character of the growth. In such cases action should be taken early, and an effort made at repression before having recourse to more desperate measures.—Dr. BARNES said that the difficulties and dangers associated with this complication varied with the seat of the tumour. When the growth projected into the cavity of the uterus the danger was very great; when situated in the lower segment of the uterus, enormous. In the latter case the tumour may be crushed, sphacelate, and give rise to pyæmia. There can be no doubt that fibroid tumours may atrophy; they are occasionally expelled. Hæmorrhage depends on the seat of the tumour.—Dr. BRAXTON HICKS said that not only small but large tumours opposing labour might be removed when situated in the lower segment of the uterus. He had removed successfully a mass as large as the fœtal head. Some cases which appeared unpromising during early pregnancy improved during the course of gestation, so as not to give any trouble. When these conditions are met with during active labour they should be treated mechanically. —Dr. GODSON said that in a case under his care large masses were discharged and the tumour disappeared.—Dr. MURRAY had seen relief to the bowels brought about by pressing the tumour from the pelvis by means of the hand introduced into the rectum.—Dr. DE GORREQUER GRIFFITH had seen three cases of this complication: two without a bad symptom; the third complicated by post-partum hæmorrhage. During gestation the tumour increased, but afterwards diminished in size.—Dr. HAYES referred to a case in which death took place from hæmorrhage before delivery. A fibroid, about the size of a Tangerine orange, which was easily enucleated after death, was found in the anterior wall of the cervix. The placenta was not prævia.—Dr. EDIS thought the best posture to effect reposition was the genu-pectoral. —After a few remarks from the President, Dr. PLAYFAIR replied, saying that post-partum hæmorrhage occurred in some of these cases, but it did not appear to be so common as one would expect.

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.

A MEETING of the Association was held on the 28th ultimo, S. Cartwright, F.R.C.S., President.

Mr. COLEMAN read a communication "On some Untoward Results of Immediate Torsion of the Teeth." Alluding to the supposed value of this operation in certain cases of dental irregularity, he showed how unsatisfactory the results might be when performed on imperfectly developed teeth. In certain cases development was entirely arrested, or absorption took place, and the tooth never descended to a level with its fellows, or even receded beyond the dental line, as occurred in a case the model of which he showed to the members present. These results he ascribed to the severance of the pulp-vessels by the operation.—Messrs. Cattlin, Edgelow, Stevenson, Gregson, and S. Cartwright joined in the discussion, there being a division of opinion as to the merits of the operation, though it was generally maintained that the operation was not justifiable before thirteen or fourteen years of age.

Mr. S. J. A. SALTER then read a paper "On some Reflex Symptoms and Results of Irritation of the Dental Branches of the Fifth Nerve," and exhibited a series of specimens of dental and alveolar necrosis and exfoliation following the eruptive fevers—scarlet fever, measles, and small-pox. He said that a few isolated specimens of this condition, preserved in our hospital museums, had been attributed to mercury, but that that explanation was refuted by modern evidence. Mr. Salter considered that they are among the specific sequelæ of the eruptive fevers; that the pulps and caps of the forming permanent teeth (members of the tegumentary system) are poisoned by the disease, die, and are shed in the only way in which they can be cast off—namely, by the necrosis and exfoliation of the capsule of bone which encases them, and to which the bone-necrosis is almost always strictly limited. Mr. Salter remarked that these cases usually occur in children about five years of age (a year or two more or less) when dental development is in its highest activity; that the morbid condition is usually symmetrical on both sides of the jaw; that the bone-necrosis is limited to the alveolar processes and capsules surrounding the teeth; that he has never seen this condition excepting after eruptive fevers; and that he has had under his own care about eighteen cases after scarlet fever, eight after measles, and four after small pox.

Mr. T. W. NUNN read a paper "On some Reflex Symptoms and Results of Irritation of the Dental Branches of the Fifth Nerve," in which he gave an account of certain cases confirmatory of the statements made by the President, Mr. Cartwright, in his communication "On Teething and its Complications" made to the Society on Nov. 22nd. The first case, which gave the keynote, as it were, to his subject, was a remarkable instance of delayed dentition in a woman between thirty and forty years of age, giving rise, by reflex irritation, to ulcer of the cornea. The ulcer, which obstinately resisted treatment, healed directly an upper bicuspid was cut.—The PRESIDENT gave several examples which had come under his notice of reflex action connected with the teeth, as also with other portions of the body, notably a remarkable case of double squint dependent upon curvature of the spine.—Mr. SALTER mentioned a case in which the iris had changed colour as a result of dental lesion.—Dr. WILTSHIRE ascribed ulceration of the cornea to the action of reflex nervous irritation on nutrition.—Mr. STEVENSON had seen good resulting from lancing the gums in cases of reflex disturbance.

Mr. HAMILTON CARTWRIGHT showed a patient aged thirty, who had suffered from neuralgia for many years, her case presenting some peculiar points of interest. The trigeminal nerve was chiefly involved, acute pain being experienced in the ear, eye, and supra-parietal region, whilst unilateral hyperæsthesia existed over the entire left side of the body from the head to the knee.

Reviews and Notices of Books.

A Treatise on Gout and Rheumatic Gout. By A. B. GARROD, M.D., F.R.S. Third Edition. London: Longmans. 1876.

DR. GARROD'S well-known treatise on Gout is one of the works of which English medical literature is justly proud, for it contains the fullest extant account of the disease from the pen of the discoverer of the real pathology of the affection. It is hardly necessary to remind our readers of the general characters of the work, which are a very accurate and careful description of the symptoms of the disease, the "original" discussion of its pathology, and a copious account of the principles of its treatment. The present edition has evidently been subjected to a thorough and careful revision, and a good deal of new material has been incorporated into the old texture. Among the additions must be specially mentioned the notes which Dr. Charcot appended to the French translation, and which have been introduced or referred to in the present edition.

A little inconsistency is here and there to be noted between theory and phraseology, which is worth the attention of the author when the work comes to another edition. For instance, Dr. Garrod believes that the relation between the deposit of urate of soda in the joints and gouty inflammation is causal, that the presence of the urate is the cause of the inflammation. He urges many reasons for this view, and amongst them the fact that inflammation appears to destroy the urate of soda, since it cannot be found in the blood near the seat of active inflammation; but he almost invariably phrases the sequence in the statement that "the gouty inflammation

is *attended with the deposition* of urate of soda"—language which naturally conveys a theory of the relation between the two the reverse of that which Dr. Garrod holds.

The author's own theory of the pathology of the disease has obtained so universal an acceptance that his discussion of the older views of the subject—those of Sir C. Scudamore and others—has lost much of its interest for the present generation of medical readers. In one respect the work fails to satisfy the scientific inquirer of the present day. The question which presses for solution is that which lies behind the knowledge of the proximate cause of the disease. What is the origin of the excess of uric acid in the blood? Dr. Garrod appears inclined to accept Zalesky's theory of the formation of uric acid in the kidneys, and its reabsorption into the blood; but this is a very hasty application to pathology of a crude theory, at present unverified by independent confirmation. Moreover, it hardly harmonises with the author's other statement, that clinical evidence of great cogency connects the production of an excess of uric acid with an altered hepatic function; but this is an aspect of the question which Dr. Garrod hardly touches. Later on he mentions some curious facts of an alternation of gout and glycosuria, which are very suggestive of a common seat of the chief morbid process in the two affections.

The full details of the chapter on treatment call for little special notice, but we may mention as of great value the practical notes on the use of the several mineral waters in gout. Two other chapters discuss, in all instances ably, but in some cases rather meagrely, "irregular attacks of gout" and the "diseases connected with gout." Especially the relation of gout to heart disease merits much fuller discussion.

The final section of the work treats of rheumatoid arthritis, and in this several new facts and figures have been introduced. But of most practical interest is the change in Dr. Garrod's views of the therapeutics of the affection, which he sums up in the following words:—"Some time ago I was inclined to take a very desponding view of the amenability of this disease to treatment, but year by year I have become more hopeful, and I have frequently seen patients who, I feel sure, if they had submitted themselves perseveringly to a rational course of steady restorative treatment, instead of being led by the solicitations of injudicious friends and empiricising advertisers to give themselves up to every form of quackery, would have been restored to health, instead of becoming, as many of them unfortunately do, miserable and incurable cripples."

Russia. By D. MACKENZIE WALLACE, M.A., member of the Imperial Russia Geographical Society. 2 vols., 8vo. London: Cassell, Petter, and Galpin. 1877.

AT any time the publication of this work would have been a notable event in literature. At the present time its appearance is of peculiar interest. It meets a want which, happily, is becoming more and more felt in this country for some trustworthy account of the present social condition and prospects of the Russian Empire. The book is the result of a special study of the Russian people, their language and manners, which extended over some years, and to which the author gave himself up, by living with them and among them. It does not pretend to be more than an outline of the more salient points in the vast subject, but it is an outline vigorously drawn by a competent hand. In a series of graphic chapters he tells us of the present conditions of travelling in Russia, of life in villages and provincial towns, of the old and the new nobility (so to speak), of the mercantile class and of the peasants, of the religions and their ministers, of Imperial and local administration, of the steppe populations, and among them of the foreign colonists; and, greatest question of all, how all the several influences which went to make Russia of old have been affected by the emancipation of the slaves, with the present and near prospective results thereof. The reader rises from the perusal of the work with a feeling that he has become possessed of a clearer knowledge of Russia and the Russians than he ever had before, and with his appetite whetted for more information on the several subjects which may more particularly interest him. For example, in the chapter entitled a "Medical Consultation," we get an insight into the dearth of medical practitioners in Russia, in parts even not the most remote from the great routes of traffic and principal towns, which enables us better to comprehend the powerful movement existing in that empire for training women to the practice of physic. It would seem well-nigh hopeless to obtain such a dispersion of skilled medicine, even in European Russia, as is desirable without recruiting the ranks of physic from the gentler sex. In the chapter on "Foreign Colonists on the Steppe," Mr. Wallace notes a common incident which happened to him while travelling on the great plain which stretches between the Sea of Azof and the Caspian. Observing in his map a place named the "Scottish Colony," near the Baths of Piatigorsk, he turned aside to inquire how this name came to exist in that locality. There he found a patriarchal-looking Circassian, who, on being questioned as to the name and the existence of any Scotchman in the neighbourhood, asks, "And why do you want to know?" "Because," was the reply, "I am myself a Scotchman, and hope to find a fellow-countryman here." To which came the astonishing rejoinder from the veneable Scotchman, "Od man, I'm a Scotchman tae! My name is John Abercrombie. Did ye never hear tell o' John Abercrombie, the famous Edinburgh doctor?" It proved a fact that this Circassian Scotchman had been purchased as a child by a band of Scotch missionaries early in the century, as one means among others of promoting Christianity among the Mussulman population, and as he had been purchased by money subscribed by Dr. Abercrombie, he had been baptised in his name, and held himself to be his foster-son.

Mr. Wallace's work is not less interesting than instructive, and in both respects it can hardly be too highly commended.

Journal of Anatomy and Physiology. Conducted by Profs. HUMPHRY, TURNER, FOSTER, and RUTHERFORD. Vol. XI., Part III. April, 1877. London: Macmillan.

THE contents of this number are—1. A Contribution to the Minute Anatomy of the Human Retina, by R. Marcus Gunn, M.A., M.B. In this paper Dr. Gunn describes an apparently direct connexion between the cones of the retina and certain of the corpuscles of the *inner* nuclear or granule layer. 2. On the Changes of the Blood-stream in Muscles through Stimulation of their Nerves, by W. H. Gaskell, M.A. In these experiments Mr. Gaskell employed the vein returning from the extensor muscles of the thigh. The essential points he finds to be (though considerable variations may occur) that with the commencement of the tetanus there is a spurt-like quickening of the stream, followed on further contraction by an almost complete cessation of flow, which then again steadily and gradually increases in volume. At the end of the tetanus the rate of flow sinks a second time for a moment, and then rises again in the course of some seconds to a new maximum, from which it falls gradually and much more slowly than it arose to near the value it possessed before the stimulation. 3. A Circulation Stage, a Live-development Slide, and an Improved Drawing Reflector, by H. A. Reeves, of the London

Hospital. 4. The Development of Elasmobranch Fishes, by F. M. Balfour, Fellow of Trinity. This memoir deals with the lateral line, the muscle plates, vertebral columns, notochord of the brain and spinal nerves, and sympathetic nervous system. 5. On the Early Stages of Development of the Nerves in Birds, by A. Milnes Marshall, B.Sc. 6. Further Observations and Experiments regarding the True Nature of Tetanus, by Sydney Ringer, M.D., and Wm. Murrell, L.R.C.P. In this paper Dr. Ringer and Mr. Murrell adduce various experiments and evidence to show that in tetanus the resistance of the cord is diminished or destroyed, so that an impression conveyed by an afferent nerve can spread throughout the reflex portion of the central nervous system and produce tetanus. They oppose the view generally accepted, that tetanus is always due to increased excitability of the spinal cord. 7. On the Extent to which Absorption can take place through the Skin of the Frog, by Wm. Stirling, D.Sc. 8. On certain Molar Movements of the Human Body produced by the Circulation of the Blood, by J. W. Gordon. In this article the author shows that by placing a person in a delicately adjusted balance, a movement equivalent to a sphygmographic tracing is capable of being generated from the aortic flow of blood. Dr. Bevan Lewis describes a new freezing microtome for the brain; and Dr. Cunningham describes a connecting twig which it appears is frequently present between the anterior divisions of the first and second dorsal nerves. The number finishes with a Report on Physiology by Dr. Stirling. Eleven plates illustrate the subjects treated of in the text. Altogether an excellent and instructive part.

OUR LIBRARY TABLE.

Quarterly Journal of Microscopical Science. No. 66. Edited by Professors LANKESTER, KLEIN, and ARCHER. Churchills.—The contents of this number are—1. A *résumé* of recent contributions to our knowledge of Fresh-water Rhizopoda, by Mr. Archer, in which the Monothalamia lobosa and rhizopoda are considered. 2. Mr. Vines gives an interesting account of Professor Strasburger's observations on Protoplasm, which shows how much there is to be observed and known in regard to what at first sight appears to be, and was formerly described as, a homogeneous lump of animal jelly. Professor Strasburger recognises an ectoplasm and an endoplasm, and subdivides the latter again. 3. Mr. D'Arcy Power gives a succinct but clear account of Professor E. v. Beneden's researches on the Dicyemidæ, parasites of the cuttlefish, differing from the Protozoa in being multicellular, and from the Metazoa in the absence of a third cell layer and internal cavity, and of any differentiated organ. 4. Dr. Stirling describes the changes in the Lung of the Cat occasioned by the presence of a small nematode worm with which they are apt to be affected, the Ollulanus tricuspis. 5. A contribution to the Anatomy and Physiology of the Retina by Professor Franz Böll. 6. On some points in the Early Development of the Hen's Egg, by P. Kidd. Lastly, Mr. George Darwin describes the characters of the Glandular Hairs of the Common Teazel.

Aristotle's Politics. Books I., III., IV. Text of Bekker. Translated by W. E. BOLLAND, M.A. Together with Introductory Essays by A. LANG, M.A., late Fellow of Merton College, Oxford. London: Longmans, Green, & Co. 1877.—Political science was regarded by the ancients as one of the most elevated of studies. It is a science, as Mr. Lang well puts it in his introductory essay, "which, having obtained a clear and critical conception of man's needs and powers, applies that conception to his institutions, and attempts to bring them into harmony with circumstances;—a science which constructs, as type and example, a model of the ideal state in which men might reach perfection, if perfection could be reached by more than an isolated person here and there in the world." Such a science offers to our consideration problems of profound interest; problems, too, which ought specially to engage the earnest thoughts of our profession. For this reason we heartily welcome this readable translation of Aristotle's Politics, and the lucid introductory essays that accompany it; and we especially commend to the notice of our readers Essay XIV., dealing with the origin of society.

Ling's Educational and Curative Exercises. By M. J. CHAPMAN, M.A. Cantab., M.D. Edin. Fourth Edition. Edited by AUG. GEORGII. London: Renshaw. 1875.—*Jahres Bericht des Schwedischen Heilgymnastischen Institutes in Bremen.* Von Prof. Dr. AXEL S. ULRICH. Bremen. 1876.—We need do little else than simply draw attention to these pamphlets. The first is a new edition of the late Dr. Chapman's essay on what has been styled the "movement cure"; and the second is the nineteenth annual report of the Swedish Medical Gymnastic Institute at Bremen. Ling, the founder of this method of treatment, died in 1839, having established a central institution at Stockholm. Objection may be taken to some of the statements given on behalf of the gymnastic method, but when due allowance is made for enthusiastic exaggerations, few will deny that regulated muscular exercise is often of great value in therapeutics. Those who advise it should, however, select their cases with discrimination, and take heed lest they fall into empiricism.

Clinical Lectures on Diseases of Women. By LOMBE ATTHILL, M.D. Fourth Edition. Dublin: Fannin and Co. 1876.—The present edition of this little work is larger than its predecessor by about twenty-two pages. Additions have been made chiefly in the lectures on Fibroid Tumours and Displacement of the Uterus. There can be no stronger proof that the work supplies a professional need than that it has reached a fourth edition in five years.

New Inventions.

THE "SAMARITAN" INVALID BEDSTEAD.

THIS bedstead (which appears to resemble in many respects the apparatus noticed by us on May 15th, 1875), introduced by the Invalid Patent Bedstead Company, of Angler's-lane, Kentish-town, possesses features which strongly recommend it to the favourable consideration of the profession. It is at once complete and effective. The patient, while lying in it, is enabled to raise himself to any angle by means of a wheel connected with a lever,

and may be turned to the right or left at pleasure. The latter movement is very simple, requiring only the pulling and buttoning of a strap, which, so to speak, converts the bed into a sofa, during which time the bed-linen may be changed. There is an ingeniously arranged commode, most easily worked, under the centre of the mattress. The patient is also given the luxuries of a desk, dining-table, and foot-rest, all readily adjusted. Every movement, with the exception of the side action, is under the control of the patient himself. The "Samaritan" Bedstead well deserves its distinctive designation, and may be unhesitatingly recommended to doctor and patient.

THE LANCET.

LONDON: SATURDAY, APRIL 21, 1877.

On a recent occasion we offered some remarks upon the general relations subsisting between the State and Medicine. Our strictures tended to show that those connexions are not of a nature to secure the full benefits of the science of health for the population. We now ask attention for a complementary aspect of this important subject—the State as *employer*. The picture presented to view will be equally unsatisfactory, and even more inexplicable.

The fault may be exposed in a single sentence. Statesmanship has not the wit, or it is unprepared, to accord to medicine the status and scope of skilled service. The recognition of a science of law is complete, and by common consent the business of drawing bills and interpreting statutes is entrusted to legal experts. When did the most experienced or discreet of legislators give practical expression to the truth that only the medical expert can frame a Bill having direct or indirect bearing upon the health of the people? Projects of law affecting professional interests have, indeed, occasionally been submitted to medical assessors, and a medical opinion has been taken on particular clauses in Bills of health involving the adoption of measures, or the appointment of officers, specifically medical. In regard, however, to the thousand-and-one Bills instituting or abolishing rules of government by which the social and personal well-being of the community may be influenced, professors of the science of life are not consulted, or their counsel is treated as of no more value than the idle words of an incompetent adviser. In short, the State deals with medicine as it would never dream of dealing with any other specialty. It assumes the right, and pretends to the power, of determining modes of procedure, and employing and directing labour, when trained knowledge is essential to prescribe the course to be pursued, and special intelligence alone can so shape action as to secure success. In every department where medical assistance is sought, or service retained, by the executive authority, the State employs practitioners of medicine—not as it would employ a soldier, sailor, or lawyer, leaving the direction of matters military, naval, or legal, to the control of experts responsible for their own organisation, but—in the spirit and after the manner of a proprietor who designs his own building, and secures the practical services of stonemason, bricklayer, and carpenter, to carry out his directions and give effect to his ideas. It is in this method of dealing with the medical question—with the science and its professors, the art and its practitioners—statesmanship fails, and well-intentioned legislators go astray.

It is needless to adduce formal proofs of the position this argument assumes. Each of the "services" designated medical, and every one of the departments in which medical men are employed, supplies abundant evidence of the mistaken view taken by the State, and the false estimate formed of functions which, while nominally classed as skilled, are uniformly subordinated to lay control, and treated as merely tributary. It is, however, important to point out that until the fundamental and all-pervading error is corrected the State can never be well and fully served, or medicine confer those vast benefits on the community which it is its high prerogative to bestow. It is not difficult to see how this should be. Science is a vital, progressive enterprise which brooks no restraint. Its course is ever changing, and new methods are devised, fresh relations established, and old connexions severed at every forward step. Codification is impracticable, a digest of principles always difficult and scarcely at any period of time promising to be advantageous. The helm must remain under the control of the mariner who works the reckoning and shapes a devious course by the changeful currents and ever-varying signs. The compact between the State and Medicine must be based on the recognition of this requirement. The service of science needs to be organised on the principle embodied in this fact. Construed into a practical shape, it implies that the medical service should be constituted apart, that it should be left free to select its own agents for each particular enterprise, to choose its own modes of action, and be judged by results. What, for example, can be more unreasonable or less likely to ensure success in any special undertaking than service performed by individuals chosen by lay caprice, and placed under an authority with no special knowledge of the duty to be discharged, the measures necessary to ensure success, or the right method of procedure. When a lay Lord of the Admiralty proposed to command the Channel fleet, with a multitude of expert counsellors ever at command, the grotesque folly of the situation excited well-deserved ridicule. This sort of thing happens daily in the administrative control of matters of health by unskilled superiors, and the course pursued excites no remark, nor apparently does it strike anyone as incongruous. How are we to explain this anomaly except on the presumption that the State policy of employing Medicine as a servant to effect some arbitrary purpose without having first secured the aid of science to determine what that purpose should be, and how best to effect it, is erroneous in conception and faulty in fact. Experience is forcing this view of the case on public opinion, and sooner or later the truth must be brought home to the Legislature, if not by the faculty of reasonable inference, by rueful failures and cruel disappointments, untoward visitations of preventable disease, and costly and humiliating eventualities which a wise and statesmanlike policy would escape.

No serious difficulty could beset the task of placing the Medical Services on a satisfactory footing, if only the State were brought to see that the science of life is an integral part of political economy, and the development of physical and moral health—by sanitary conditions affecting the whole population—should be the primary aim of government. The intimate relation of bodily weakness, infirmity, and decrepitude with poverty and crime, is beginning to be perceived. When may we hope to see the logic of facts working out practical conclusions? It is vain to anticipate any effectual reform of the existing system of administration until the needs of the situation are perceived in their entirety. This is why we prefer to speak of general principles rather than detailed manifestations of the error per-

vading thought, sentiment, and policy. The faults and friction observed in the daily working of the administrative machinery are the consequences of a mistaken use of defective material. It is waste of strength and temper to attempt the remedy of small errors and deficiencies when the organisation is wrong throughout. The only hope of improvement lies in the endeavour to convince the responsible trustees of a mismanaged property that its permanent value may be increased tenfold by entire reconstruction. To this end our criticism is directed and, in the spirit of earnest counsel to a policy of higher wisdom, these remarks are couched. It is not alone in the interests of Medicine that we protest the State should cease to regard it simply as a servant. In the interests of the people and the nation and progress, we would fain see Science taken into counsel in place of being *employed*.

THE meeting at the house of the Society of Arts, on Tuesday, to hear a paper on "Metropolitan Medical Relief," by Sir CHARLES TREVELYAN, presided over by Dr. ACLAND, was a decided success, and will help much to favour the Provident principle in London. We spend no time in expressing our interest in the great design of the Charity Organisation Society and of all intelligent members of society. It is palpable that the medical profession has the deepest interest in the greatest possible limitation of the system of gratuitous relief. The labour on the part of the medical profession involved in this system is enormous. We get no equivalent for it. Unlike nearly all other labourers, it is thought fit that we should work for nothing on a large scale. The medical labourer is not unworthy of his hire, but he does not get it. The beneficent public pays the druggist for drugs and the butcher for meat supplied to the poor, but takes exceedingly little interest in the payment of the doctor who ministers healing to them. He is thought to be superior to all such consideration, and to be repaid by the very nature of his duty. The profession is under great obligations to the Charity Organisation Society for devoting so much of its attention to this subject—necessarily a delicate one for the profession to handle,—and cannot but feel glad at any indications on the part of the public of more thought for its claims in connexion with that great system of medical relief, the suspension of which for one day in London would imply enormous pain and suffering. But great as is what we may call the selfish interest of the profession in this subject, we venture to say that medical men watch the introduction of the Provident principle into medical charities for the sake of its advantage to the people, in developing the feeling of independence in them and in securing for them at very moderate cost the attendance of physicians and surgeons of their own selection. Medical help must be given promptly. It cannot be withheld till sound moral and economical principles permeate the masses of the people; but the profession is not the less concerned in the promotion and propagation of such principles, alike from political and patriotic considerations.

Having said this much, we may be excused for a few words of criticism. We regretted to see the meeting so entirely in the hands of gentlemen whose views, however sound, are very well known. Sir CHARLES TREVELYAN and Sir RUTHERFORD ALCOCK's contributions to the elucidation of this subject are exceedingly valuable, but they are a little monotonous and one-sided. Sir CHARLES spoke for more than an hour, and Sir RUTHERFORD, who followed in the same line, also spoke too long. The medical speeches saved the discussion from being both dry and narrow. Sir WILLIAM GULL, Mr. TIMOTHY HOLMES, Mr. BRUDENELL CARTER, and Dr. WEST really deepened the interest of the audience in the question by showing the human and social bearings of it, and the many difficulties encountered in the detailed application of the provident principle in hospitals and dispensaries. It would be an excellent exercise for Sir CHARLES TREVELYAN to get away from his rather too sharply defined classification of the poor, and very vague generalisation on medical charities, to inquire more deeply into the causes of the slight success of the provident principle, and into the questionable advantage of some of the things that are done in its name. The remarks of Mr. HOLMES and Dr. WEST showed the practical acquaintance with this subject that only medical men can have. The slow growth of Provident Dispensaries requires further explanation than is given in simply attributing it to the competition of free hospitals and dispensaries. More discouraging than the slow multiplication of such dispensaries is the small pecuniary recompense to the medical man, great labour and attention being rewarded by a most disproportionate sum. At Camberwell, one of the best institutions in London, with 5696 members, £555, in 1873, was divided among six medical officers. At Haverstock-hill, with 2326 members, £320 was divided among three medical officers. At Leamington, with 3436 members, £336 was divided among three medical officers. Then, under the name of providence, there is much going on in the profession now which is a very questionable improvement on the old principle of gratuitous advice to the poor. In almost every street there is a so-called Provident Dispensary, which on inquiry turns out to be the private surgery of a general practitioner, who thinks so humbly of himself and his drugs as to give them both for a shilling a week! Surely it is more degrading and misleading to represent it as possible to give good brains and good drugs for a shilling a week than to give both gratuitously in urgent circumstances to the poor. Some of the proposals of the Charity Organisation Society are open to a similar objection. Sir WM. GULL was right in pointing at intemperance and false notions of the use of stimulants as at the root of much of the disease and improvidence of the people. By the way, he was a little too hard on the poor for their love of medicine; it is really often of great advantage to them and to their children. Mr. CARTER went deeper still in tracing much of even their intemperance to bad sanitary conditions permitted by a political system that lightly regards the health of the people; and Mr. HOLMES did admirably when he suggested, as we have often done, that the inquiry made into the circumstances of people should be largely medical. This is never resented, mainly because it is essentially humane in its character, and regards the wealth or poverty of a family as determined, not by mere wages, but by wants, and especially by its greater or less freedom from impoverishing sickness or mortality. The quality of mercy cannot be dissociated from medicine, and

political economists must take much counsel of medical men in reforming medical charities.

THE recent discussion in Parliament on the subject of water-supply cannot fail to do good. Mr. BROWN, who raised it, wisely confined himself mainly to the supply of rural districts, and adduced facts and arguments familiar to all our readers in illustration of the widespread mortality due to polluted wells. We need not recapitulate his statements. Few medical men are without personal experience in the matter, and many are striving, and have striven for years, to abate the evil. Thousands die every year from the poison of foul water, and many more suffer long-continued sickness. Railway accidents, colliery explosions, even battles, cannot claim as many victims as the village pump, and it is not too much to say that a perceptible increase in the average duration of human life would reward the Government which succeeded in extirpating its risks.

It may almost be said to be a matter for regret that the poison of sewage is so irregular in its action. Were it as certain in its effects as arsenic, it would probably do less harm, for proper care would then be taken to avoid it. It is hard to move the public by statistics or single cases, however striking; and the physician who is compelled to admit that very foul water may be, and often is, drunk with impunity, constantly finds it impossible to convince individuals and local authorities of the risks they are running. The fact cannot be too often repeated that chemical analysis, while it tells us with absolute certainty when water is safe, cannot always tell us when it is actively noxious. We know next to nothing yet of the real toxic agents in impure water. Diluted excreta, if fresh, and from a healthy subject, would be unlikely to injure anybody, but as the excreta frequently contain the germs of zymotic disease, the sewage-contaminated well, which is harmless one week, may become deadly the next, although analysis reveals no difference. This is the doctrine which every medical practitioner should preach.

It must be remembered, moreover, that contamination with human excreta is not the only contamination to be feared. The stagnant water of marshy districts, rich in the products of vegetable decay and the washings of the soil, and almost devoid of oxygen, is a fruitful cause of intermittent fever. There is reason to believe that a good deal of the mischief ascribed to the atmosphere of such districts is often due to the water, and might be avoided by proper care.

With regard to the remedy for the present state of things in our rural districts, we freely admit the enormous difficulty. In some few cases it is perhaps impossible at the present time to point out a satisfactory cure for the evil. These cases are, however, exceptional, and in the great majority the cure would be easy but for the opposing forces of human selfishness, ignorance, and obstinacy. We respect the principle of local self-government, and freely admit the large amount of good work which has been accomplished by our local sanitary authorities throughout the kingdom. Any change which should hinder local authorities from doing their own work would be a grave blunder. But to stimulate, or even in case of necessity to compel, is not to hinder, and the experience of the Local Government Board during the last few years, though by no means as satisfactory as could be wished, is sufficient to show that such stimulation is often requisite, and can always be applied without injury to local authority. The plain truth is that the constitution of a local sanitary authority is very much a matter of chance. It depends in the majority of cases on local influence only, and as the more highly-educated classes too often shirk their proper duty and stand aloof from what they call "local politics," the active government falls mainly into the hands of men who, though commonly shrewd and honest, are yet apt to take too low a view of their duty, and to think too much of "keeping the rates down." If we add to this that members of the local authority have in many cases a direct personal interest in the maintenance of abuses, the necessity of some imperial control more stringent than the present system of supervision seems evident.

This, then, to put it shortly, is the manner in which legislation in regard to rural water-supply and similar matters should proceed. The powers of local authorities should be extended, to enable them more effectually to deal with abuses; the powers and duties of the central government should be extended, that the local authorities may not fail in their duty. In other words, we advise more permission, but only if coupled with more compulsion.

THE now undoubted reappearance of plague in Mesopotamia, and the serious epidemic activity of cholera in parts of India and, as far as is now known, of countries bordering upon India, form a concurrence of events which cannot but be regarded with grave anxiety, especially upon the eve, as is now but too probable, of a great European war.

Earlier in the year we had occasion to refer to the rumours existing in the Levant of the reappearance of plague on the Lower Euphrates. These rumours subsided, and for the time there was some hope that they might prove unfounded. All doubt, however, is now set at rest by the official information which has been published in the *Gazette* by the Board of Trade. Plague has broken out in Bagdad, and is rapidly increasing there, and information that we have from other sources renders it probable that the disease has shown itself in other places in the vicinity of that city, some of which have not suffered before since the new development of the disease in Mesopotamia three or four years ago. In describing the progress of the epidemic in and about Bagdad last year, we took occasion to point out that each year since its reappearance in that district it had covered a wider area, and it will be remembered that last year it crossed the Turco-Persian frontier and broke out at Shuster, in Khuzistan. From the phenomena of the epidemic to this period it was feared, especially by the physicians on the spot, that if it should recur in the present year, it must be expected to extend over a still wider area, and show itself in even a more aggravated form than had yet been observed. This opinion is concurred in by Surgeon-Major COLVILL, the medical officer attached to the British Embassy at Bagdad, and is expressed in his official report on the subject of the last and previous year's outbreak. The course, therefore, of the present reappearance of plague in

Bagdad and the surrounding district will be followed with no little anxiety, for any considerable extension of the malady will not only more seriously compromise Persia, but will endanger Syria.

With regard to cholera, the news, so far as Europe is concerned, is more alarming than with regard to plague. From the report of the Sanitary Commissioner with the Government of India, Dr. CUNNINGHAM, on the cholera epidemic of 1875, and the incidental information furnished to the present time by the Indian journals, it may be gathered that cholera began to show epidemic activity in Lower Bengal and Assam towards the close of 1874; that in 1875 it spread over Southern India, the Bombay Presidency, and part of Northern India; and that in 1876 it was very active in Northern India, and extended then beyond the British frontier. It is now reported that cholera during the last-named year spread widely in Affghanistan and Beloochistan, attacking both Khelat and Herat. If this be the case, cholera, at the close of the year, must have been on the Persian frontier at more than one point, and we may anticipate next to hear of its presence in Persia. In fact, so far as our present information extends, it would appear as if another great extension of cholera were in progress along the route which the disease followed in the epidemic of 1848–49.

Serious as this prospect is, a war between Russia and Turkey will necessarily make it more serious with regard both to cholera and the plague. It involves the two nations across whose frontiers the epidemics must advance, if they should extend westward, and who alone could offer any impediment to their progress. In the desperate struggle of war, it is unlikely that those safeguards against disease which appear to be practicable only in a state of peace can be regarded. Indeed, the struggle may be expected to precipitate the evils dreaded.

Annotations.

"Ne quid nimis."

THE TREACHEROUS SEASON.

THE proverbially changeable climate of these islands has, during the last fifteen or twenty years, exhibited a tendency to peculiarly capricious changes in the later weeks of March, in April, and even far into May. Without speculating as to the causes of this intensifying of the local evil—which consist rather in a multiplication of changes than any notable increase of the differences of temperature occurring,—it may be useful to draw attention to the altered conditions, because, stealing upon us insensibly, the need of better measures to defend the organism against their malign influence may not be perceived. The period of fully two months which we have indicated might fairly be recognised as a fifth season, intermediate between winter and spring, or spring and summer; destroying the old-fashioned idea of spring, and connecting the undefined close of an ill-developed winter by a "green Christmas" with an unsatisfactory summer. Looking to the influence this anomalous phase of the climateric cycle exerts on the productive functions of the earth, and upon the health of man, it would not be unreasonable to call it the "treacherous season." Probably more death-blows are received at this period than at any other in the chain of weather vicissitudes. Weakly and sickly folk, who have survived the perils of continuous cold, and the more deadly dangers of perpetual damp, succumb to the insidious assault of an enemy whose method consists in inducing or provoking his victim to expose his vulnerable point to needless risks by a series of feints. A warm, bright, and genial morning beguiles the unsuspecting to lay aside some article of clothing felt to be oppressive; a raw, comfortless, and depressing afternoon, sometimes even intensely cold, drives home the weapon as soon as the guard has been dropped. It is a terrible business, this play for life with the struggling creatures who have escaped the dangers of an English winter. Wonder is occasionally expressed that known invalids live so long, while apparently strong people die. The special mortality of this treacherous season explains the mystery. The consciously weak commonly take precautions to avoid the perils of the period; the too confident, in their contempt of danger dash heedlessly forward, dare everything, and too often, in an unwary moment, meet their doom. It needs less vital force to face the cold of an Arctic winter or the heat of a Tropical summer—organic disease or idiosyncratic susceptibility apart—than to endure the exhausting drain of energy required to carry an average man or woman, who is much exposed to the changes of this season, unscathed through the ordeal. The circumstance that the majority are not apparently affected goes far to dispose of the hypothesis that the English constitution is racially impaired. These general reflections may serve to direct attention to the grave perils of the period through which we are passing, and will suggest wisdom of more than common caution in yielding to the seductive influence of soft breezes, bright skies, and partial elevations of temperature—not unfrequently the transitory effect—of a vapour wafted slowly over the surface, and leaving anything but health in its train. Meanwhile, the special matter to which we desire to point strongly is the need of bestowing more than ordinary attention on the state of the nervous system at this season. There is no greater fallacy than that which describes November as the month of suicides and general despondency. March and, of late years, April furnish a significant crop of dolorous proofs that mind-distress and depression commonly occur at the critical season when the full force of nerve, muscle, and mind, is necessary to carry the dweller in these dull climes over the dead-point in the year's revolution, and bear him safely through the shoal of dangers with which it is beset.

INFANT MORTALITY IN LONDON IN 1876.

THERE are many excellent reasons why infant mortality—that is, the death-rate of children during their first year of life—should be accepted as a trustworthy test of the sanitary condition of a population, taken in its largest sense. One of the most important of these reasons is that infant mortality, measured by the proportion of deaths under one year to births registered, is undisturbed by the influence of doubtful estimates of population, of sex and age proportions, and deaths in public institutions, all of which throw difficulties in the way of the comparison of the crude death-rate at all ages in different populations. The deaths of infants under one year of age in London averaged 15·5 per cent. of the births registered during the ten years 1851-60, and in the following decade, 1861-70, the proportion increased to 16·2 per cent., while during the first five years of the current decade the proportion has averaged 16·1. During last year the proportion of deaths under one year to births was 15·7 per cent., against 15·5 and 16·2 in the two preceding years. It may just be noted that in the whole of England and Wales the proportion of infant mortality in

1876 averaged 14·6 per cent., and was lower than in any year since 1862. Bearing in mind that London is the largest city in the world, and that urban aggregation is invariably unfavourable to infant life, the excess of infant mortality in the metropolis is not large. The excess is, however, undoubted, as Dr. Sutton, in his recent paper on the subject, showed that the proportion of deaths under one year to births among the middle and upper classes in London in 1875 was less than 8 per cent. Infant mortality in nineteen of the largest English towns, other than London, averaged 17·5 per cent. in 1876, whereas the proportion in London did not exceed 15·7. Among the five groups of metropolitan registration districts the lowest death-rate of infants was 14·8 in South London, where the density of the population is smallest; it is somewhat surprising to find the highest rate occurred in the West group of districts, where it was equal to 17·1 per cent. Examination of the rates in greater detail shows that whereas in Hampstead only 12·3 per cent. of the children born died during their first year of life, the proportion ranged upwards in the other districts to 20·8 in Chelsea, and 21·0 in the Strand district. Chelsea is divided into three registration sub-districts, in the north-western of which the proportion of deaths under one year to births was equal to 22·0 per cent. The sacrifice of young lives in some parts of the Strand district during 1876 was still more startling; in the Clement Danes sub-district infant mortality was equal to 23·7, and in that of Charing-cross to 28·8 per cent. of the births. In the worst parts of the Chelsea and Strand districts there can be no doubt that fully one of every three infants born die during the first year of life. Such facts call eloquently for the infusion of more energy and public spirit into sanitary matters in some parts of the metropolis. The massacre of the innocents which is going on in Chelsea and Strand districts, together with the inseparable injury to the health of the survivors, loudly demands public attention. Moreover, it cannot be too clearly understood that the same conditions which produce high death-rates among children exert a powerful influence in filling our workhouses, lunatic asylums, and prisons. Indifference in sanitary matters is as extravagant as it is inhuman.

THE IMPORTATION OF EPIDEMIC DISEASES INTO THE COLONIES.

THE respective governments of our colonies are continually complaining as to the importation of epidemic diseases, to prevent which it appears that all regulations hitherto enforced are wholly insufficient. Advices from Sydney, New South Wales, dated January 25th, recite that the steamship *Brisbane* arrived with small-pox on board, but that, nevertheless, the captain evaded the regulations, took his ship at once into the harbour, and landed the passengers. As a result small-pox soon afterwards appeared in a family living on the wharf, and the disease has also spread to H.M.'s ships *Sappho*, *Conflict*, and *Wolverine*, all of which were at the above date flying the yellow flag. The importation of small-pox into Sydney is a specially grave matter, because there is no compulsory Vaccination Act, and it is reported that two generations of the inhabitants are almost entirely unvaccinated.

The residents at Mauritius have lately been very much exercised because H.M.S. *Orontes*, having some cases of measles on board, steamed into harbour without a yellow flag or any other evidence of the existence of a contagious disease among the crew. It is reported that "the Quarantine Board assembled and passed a resolution begging the Governor to order the *Orontes* away." Captain Seymour accordingly went off without landing the 90th Regiment or embarking the Buffs, and when the *Orontes* reached Natal, her next port of destination, there were thirty-seven cases of measles on board. We shall probably hear by next advices from Natal some equally uncomfortable reports as to the importation of disease into that colony.

The circumstances briefly recorded above show pretty plainly that the so-called "quarantine" system at our colonial ports is a delusion and a mockery. The only means by which the importation of epidemic diseases can be prevented is to institute a systematic sanitary inspection of all vessels immediately after arrival, and if any cases of contagious sickness are found, to remove them immediately to a place provided for the purpose. The old plan of isolating the ship, and everyone connected with her, whether ill or well, has been proved to be futile as to its results, cruel, and detrimental to commerce, and as regards arrivals in the United Kingdom has long since been abandoned. The trade of our largest colonial ports is not so overwhelming at present as to prevent the successful adoption of a system already at work in the busiest river in the world, and the authorities at Port Philip, Sydney, &c., might also glean much useful knowledge on this question from the New York Quarantine Establishment, which is well organised and carefully worked. It is within our knowledge that at most of the chief ports of the colonies no sanitary inquiries at all are made on the arrival of a vessel "from foreign," but a vast hubbub is raised when an importation of disease occurs, and the mischief is already done.

Colonial governments would do wisely to study the port sanitary sections of the Public Health Act of 1875, and Lord Carnarvon would do well to direct attention to this matter officially. It is to be remarked, however, that, as regards the United Kingdom, Her Majesty's commissioned ships and those belonging to foreign governments are specially exempted from sanitary inspection by the local authority, because it is assumed that their commanders, acting under medical advice, will make such arrangements as shall prevent harm to the shore community. Recent occurrences at Fiji and Mauritius would seem to show that this assumption is not always justified by events.

"OVERWORK" OF JUDGES.

WITH great satisfaction we hear of the convalescence of Lord Justice Amphlett; but this most recent of a long series of instances of "overwork" in which members of the judicial bench have been the sufferers must not be allowed to pass without notice. The injury inflicted on judges, of all ranks, by compelling them to sit in ill-ventilated courts many hours daily is a subject for serious consideration. It is strange the matter, although frequently mentioned, has not yet attracted the attention it demands. There is something humiliating in the reflection that the evil has not long since been remedied. The Lord Chief Justice has not escaped, and in turn nearly all the members of a bench, which never stood higher in public esteem and confidence than at the present moment, have been affected. The measures needed are two—more judges, and better courts. The first is a question of cost, and we think Parliament greatly misapprehends the feeling of the community of taxpayers in neglecting to compel the Executive to increase the strength of the bench considerably. As a mere matter of commercial policy it would be economical to augment the total number of judges by fifty per cent. The block of business is very serious, and causes pecuniary loss to the public, against which the salaries of a half-score of new judges would be insignificant. We are, however, looking at the matter from the medical stand-point: the bench is undoubtedly seriously overworked. The hours imposed on judges of assize, and even the courts of Westminster, are too long and badly chosen. The condition of the apartments

in which sittings are held is simply discreditable. The colossal edifice near Temple Bar may be rising with due, though tardy, rapidity; upon that topic we offer no opinion; but meanwhile something should be done to relieve the country from the reproach of dealing with this matter in a spirit of strange discourtesy to men who have a high claim on respectful sympathy, and in a niggardly, half-hearted fashion, which not even the passion for thrift can explain or excuse.

THE FACTORY AND WORKSHOPS LAW CONSOLIDATION BILL.

THIS Bill, which was very recently introduced into the House of Commons by the Home Secretary, contains a great many important provisions directly relating to the health and welfare of a large section of the people. It is avowedly a Consolidation Bill, for, as Mr. Cross remarked in moving for leave to introduce it, there were no less than sixteen Acts to be dealt with, and there was no doubt that factory legislation had conferred inestimable benefits upon the working classes of this country. The Bill now before Parliament is embodied in one hundred clauses, the main object being to abolish, in the essential points, the technical differences between factories and workshops. Under the present system, if a manufacturer employs less than fifty hands his establishment comes under the Workshops Act, which, as to working hours and other matters, gives an advantage to the manufacturer, but is detrimental to the health of the *employés*. Mr. Cross proposes to abolish restrictions as to labour of adult women in places where no steam, water, or other mechanical power is employed. The other relaxations as to workshops are of a minor character; and as to what are called domestic workshops—i. e., where a man and his family only are employed—it is considered better to leave them to the operation of the Public Health Act, and not to subject them to the periodical visits of Home Office inspectors. The clauses relating to certifying surgeons do not require special comment, as no material change appears to have been made either in the scale of fees or in the duties required under the present Acts.

The Bill is, as the Home Secretary indicated, now under the consideration of the country, and the second reading will not, in all probability, be taken for several weeks from this date. It must be a great disappointment to all those interested that the canal population has not been dealt with in this Bill. But when produced for second reading this particular question can perhaps be more conveniently discussed.

DISGUISED PERILS.

IT is much to be regretted that the practice of disguising the existence of contagious disease is adopted, if not approved, in families having considerable claims to be deemed respectable. A child being affected with scarlatina, measles, or other communicable malady, is put away at the top of a house, and while all the forms of isolation are observed during the day, the rules are relaxed at night, and servants and youthful members of the household being charged not to mention the presence of illness, the peril is masked, the means taken to prevent extension being practically useless. Unfortunately, as we have said, this appears to be a frequent occurrence among the well-to-do classes of society; and to the disregard of honesty and prudence involved, well-informed practitioners ascribe the failure of measures generally supposed to be effectual against the spread of disease. Instances of the class have recently been brought under our notice, and we deem it a public duty to protest. It is easy to understand that heads of families may be unwilling to publish the invasion of a contagious malady, and reluctant to break off, for themselves and their households, perilous relations with the world. It is pleaded that this is impossible; that the inconvenience is too great to be incurred; that the risk is not of sufficient magnitude to compel recourse to extreme precautions; that children must have infantile maladies, and it is needless pain and trouble to strive to protect them. This is the view taken by parents of the infected children. Those whose little ones may contract the malady from disguised sources of contagion are impressed with a widely different aspect of the case. Nevertheless, in their turn, these indignant housekeepers veil their own misfortunes with no less carefulness. We have long contended that all cases of communicable disease should be registered. Short of this measure, it is not unreasonable, we think, to expect honesty and fairness on the part of respectable persons having children or members of their households "down with fever"—maladies which, by a pleasant fiction, they describe as "chicken-pox," "a red rash,"—and even less alarming "indispositions." Measles is a formidable malady to the adult; and heads of families who persist in maintaining the ordinary relations with society,—giving dinners, receiving, and even permitting the, as yet, unaffected members of their households to visit and frequent places of concourse, without the least sense of impropriety, must be either very stolid or unscrupulous,—it may be difficult to decide which.

THE LEPER.

WE hope that our Indian and Colonial administrations will take due notice of two very important declarations which have recently been made upon the subject of leprosy by the College of Physicians. In two separate reports the College has distinctly affirmed—firstly, that a great deal may be done by medical and moral treatment to improve the diseased condition of the leper, so that in many cases in which he is virtually a cripple, his state can be so ameliorated that he may be enabled to resume some useful occupation, if only for a while; and, secondly, the good effects of segregation. Upon these two matters much difference of opinion has been expressed of late years, and the Government may be said to have had some ground for delaying any decided action in reference to the care of the leprous poor in many of our dependencies. But the College has now pronounced it the positive duty of the Indian and Colonial Governments to properly house and tend the leper, upon medical and sanitary grounds and apart from the general question of mere charitable relief. The cause which immediately evoked this expression of opinion on the part of the College of Physicians was a request made to the College by Lord Carnarvon for information relative to the significance of certain statistical data furnished by Dr. Vandyke Carter, and embodying the apparently favourable results of segregation as carried out in Norway. It is important to state that whilst the College admits that such results do follow segregation, yet it urges the adoption of this practice as a rule, for reasons wholly different from those advanced by Dr. Carter and others who agree with him. The latter recommend it because it appears to check the spread of leprosy by contagion. The College of Physicians does not allow that the disease has been shown to be contagious, and believes that segregation operates in a different way. The Indian Government, in a recent minute which we had occasion to notice a little time ago, assumed, and, in fact, stated in positive terms, that those who recommended segregation were contagionists, and it excused itself from adopting any such measure for the reason that there was no truth in the contagion theory. The decision of the College of Physicians should undeceive the Indian authorities on this point, and

show them that there are other and satisfactory reasons beyond that of the untenable one of contagion why segregation should be put into operation in those districts where leprosy prevails. The Indian Government declined to adopt segregation also on the score of expense, but this ought not to stand in the way. We believe, moreover, that means could be found to carry out the practice without incurring any ruinous outlay. The present outcast and neglected state of the lepers in our dependencies is a disgrace to humanity and to our Christianity, and we trust the humane attitude of the College of Physicians will awaken the official mind to a sense of its duty towards our leper communities.

LICENSED LODGING-HOUSES AT CAMBRIDGE.

THE Lodging-house Syndicate at Cambridge, in an amended report recently issued, recommend the appointment of a gentleman whose duty shall consist in attending the meetings of the Syndicate, and inspecting annually all houses for which licences are desired, with reference to their sanitary condition and means of accommodation for students. This is a step in the right direction, and it is surprising that for so many years such an essential matter has been disregarded. We trust, however, though undertaken late, the reform in the sanitary condition of the lodging-houses will now be effectually carried out. But it is to be hoped that the authorities will not make the mistake of entrusting the important duty of inspection to a layman. We observe that it is intended to give the title of "Secretary to the Syndicate" to the gentleman appointed, from which we infer that his duties as inspector are to be subordinate to his work as clerk. This ought not to be the case, since any inspection, unless carried out by a medical man specially trained for such work, would prove a farce. The proper plan would be for the Syndicate to request the medical officer of health for the town to inspect annually the lodging-houses for them, and furnish them with a report of their sanitary condition. If this proposal is not feasible on account of objections which might be raised on the part of the town, the Syndicate could readily find among the medical graduates of the University gentlemen who would be pleased to spend two or three weeks at Cambridge during the autumn months, and make the necessary inspection. At Oxford, where the lodging-houses are inspected by laymen, complaints are still frequent of the insanitary condition of the licensed lodgings. What the state of some of these is can be judged by reading the letter from "A Resident B.A.," which appeared in THE LANCET of Dec. 9th, 1876. No amateur sanitary inspection can ever be satisfactory, since only a medical man can be aware of the dangers to be guarded against and the means of ensuring efficient protection.

PANIC AS A CAUSE OF DISEASE.

THE social and pecuniary effects of excitement, like that now raging on the Stock Exchanges of Europe, and notably those of Paris and London, are apparent. The victims of loss and embarrassment bear the marks of injury on the surface features of their lives and in their purses. There are, however, unhappily, deeper and more serious consequences which escape notice, but nevertheless work dire and lasting mischief, too often culminating in ruin. Perhaps there is no greater wear and tear of mind than that the speculator undergoes in periods of suspense and panic. Even the investor suffers acutely; while the gambler, who trusts only to chance, and is ever haunted by the consciousness that he has no solid resources to fall back upon, endures an agony of alternate hope and fear few minds can sustain. All this mental torture counts for nothing in the estimation of the public, but wrecks of mind are found drifting on the stream months or years after a panic has been forgotten, and many a strong craft sinks shattered at the time. This is a terrible aspect of the subject, and one which should not be wholly disregarded by those who seek to clear away some of the worst perils that beset the course of human life. It would be well if by stating the facts faithfully we could hope to warn triflers of their danger. If the prospect of ultimate profit by speculation were more certain than it is, the game would scarcely be worth the candle, seeing the life it entails and the springs of happiness it may poison or exhaust. Many who dare the chances of pecuniary loss are not aware of the mental perils which await them in the crisis of the venture. The stake is not one of money alone, but mind. In the moment of supreme tension the faculty of mental cohesion and control may be overstrained. Recovery, in all cases highly improbable, is in the great majority of instances impossible. The significant symptoms of decadence do not at once, perhaps, become apparent. The death-blow has been dealt, but the collapse is deferred, and seems to supervene slowly, perhaps attributed to some other cause. We have no desire to play the part of alarmists in the matter of mental disease, but here is a grave and overlooked source of deadly mischief, and it is a duty to cry "wolf."

INCITING TO BREAK THE VACCINATION LAWS.

MR. SCLATER-BOOTH gave a vague and unsatisfactory answer, a few days ago, to the question addressed to him by Mr. P. Taylor on the subject of prosecution for non-compliance with the Vaccination Acts. The President of the Local Government Board evidently overlooks the fact that inciting to break a law is a misdemeanour, and when an individual not only himself defies a mandate of the statute-book enforced by a court of law many times in succession, but "stimulates others to do so," he is guilty of a grave offence, for which supplementary proceedings would seem to be necessary. It is, of course, for the law officers of the Crown to determine the course which it may be necessary or expedient to take in this matter, but it was clearly the ministerial duty of Mr. Sclater-Booth to take up something more than a merely negative position in regard to a subject of growing interest, especially as the right hon. gentleman himself admits the necessity which exists for ensuring the active administration of the laws enjoining vaccination as a prophylactic against the small-pox.

THE SALE OF CHLORAL BY DRUGGISTS.

AT an inquest held lately in Carlisle the coroner made some very strong observations, but not too strong, on the sale by druggists of chloral, often in large quantities. The deceased had been in the habit of taking it for some years, and was supplied with it by druggists, though not always in the quantity he asked for. Once he asked for 120 grains and was supplied with 60, though charged for the larger amount. Another time he asked for 300 grains, 150 in each bottle, averring that his wife took it too. He was accommodated with 130 grains, 65 in each bottle. This was the night before death. In the morning he was found dead with an empty bottle that had contained chloral on one side and a bottle with a small quantity of whisky on the other. The chemist, whose assistant, nineteen years of age, had supplied the deadly drug, justified himself, and, indeed, in the present state of the law it would be difficult to incriminate him. But what shall we say of the state of the law that permits the unrestricted sale of chloral? The coroner said that this was the third death of the kind on which he had

held an inquest. After the last, about six months ago, he took steps to get chloral included in the list of poisons whose sale is prohibited; but nothing had been done. Ours is a slow and impotent Legislature, and probably a good many more deaths will take place before the law is amended. Meantime we are glad coroners and juries do their duty, as in this case, in making appeals for amendment.

SAVE ME FROM MY FRIENDS.

AN unwise friend is as bad as, if not worse than, an enemy, and when the friend shows his admiration of a professional man by puffing him in a public journal, he does him one of the greatest of ill-services. We were sorry to see the name of a well-known London oculist mentioned recently in a most improper manner in a paper which has a wide circulation among the middle and lower classes. "Any who want oculist advice" were informed that this gentleman "is now a rival, and not an unfriendly one," of the most eminent member of this special department of practice; and he was spoken of as one who "had had a good many blessings invoked on him." We assume that this was inserted without the knowledge of the gentleman, but we hope that he will be careful to restrain the ardour of his grateful friends, advising them to invoke blessings on him in private, but not in public. This is not the only instance that has occurred of late where the names of some alien oculists have appeared far too prominently in the public prints. Such conduct must be entirely distasteful to the leading members of this branch of surgical practice, and we hope that the honour of this, the highest and best of the special departments of practice, will be jealously guarded by all its members, and that we may not again notice such a want of propriety on the part of their friends.

HEALTH OF THE TROOPS SERVING IN THE UNITED KINGDOM.

FROM the Army Medical Department Report issued this week we find that the average annual strength of the non-commissioned officers and men serving in the United Kingdom during the year 1875 was 88,147. The admissions into hospital in this number were 73,279, being at the rate of 831·3 per 1000 of the strength; the average number of men in hospital daily throughout the year was 3568, being at the rate of 40·47 per 1000 of strength; 783 deaths occurred among the men present with their corps, in addition to which 87 deaths occurred among men detached, the average number of whom is given as 4655; the death-rate of non-commissioned officers and men in 1875, therefore, is 9·36 per 1000 of strength. The admission rate is 9·4 lower, the constantly sick rate is 1·88 higher, and the death-rate is ·57 per 1000 of the strength higher than the corresponding ratio of the preceding year.

LYING-IN HOSPITAL STATISTICS.

THE Registrar-General's annual summary for London, relating to 1876, which has just been issued, contains some valuable statistics concerning the five metropolitan Lying-in Hospitals: statistics which cannot fail to have an important bearing upon the future management of these institutions. The number of deliveries in these five hospitals during the year was 1236, and varied from 55 in St. Saviour's, to 408 and 416 in the City of London and the Queen Charlotte's. At these 1286 deliveries, 1301 children were born, as there were 15 cases of twins. Of the 1301 children, 1238 were born alive, and 63 were still-born; thus the still-born were in the proportion of 4·8 per cent. to the total children born, and 5·1 per cent. to the children born alive. When it is considered that the deliveries in lying-in hospitals include but a very small proportion of cases of premature birth, the percentage of still-births appears high compared with still-birth statistics which are available for many of the Continental States. Unfortunately no statistics of still-births are provided for in the United Kingdom. The mortality of women in child-bearing forms the most important part of the statistics derived from the returns furnished to the Registrar-General by the five metropolitan Lying-in Hospitals. The deaths of 33 women were registered in these five hospitals, equal to 25·7 per 1000 deliveries. In the whole of London, during 1876, 609 died in child-birth or from puerperal fever; and we know that the births of 127,015 live-born children were registered during the year. In order to calculate the number of deliveries from the number of live-born children, it is necessary to correct that number in accordance with the estimated proportions of still-births and of multiple-births in an English population. After this correction, it appears that the proportion of deaths of mothers in child-bearing, per 1000 deliveries, in the whole of London, exclusive of the lying-in hospitals, did not exceed 4·4; whereas in those institutions the proportion was, as before stated, so high as 25·7 per 1000. It may be stated that puerperal fever was epidemic in the Queen Charlotte's Hospital, and led to the closing of that institution during the latter part of the year. The rate of mortality in the four other hospitals was equal, however, to 16·1 per 1000, although no death was recorded in St. Saviour's Hospital, in which 55 deliveries took place.

POLLUTION OF RIVERS.

A LARGE and influential deputation waited upon the President of the Local Government Board on Tuesday last, to submit several important amendments of the Rivers Pollution Act, which, as our readers may remember, received the Royal assent last session, but does not, practically, come into operation until August next. The deputation was introduced by Earl Percy, M.P., and among those present were Earl Grey, Captain Home, M.P., Dr. B. W. Richardson, Dr. Lyon Playfair, M.P., the Earl of Leven and Melville, Mr. Brudenell Carter, Mr. Harry Leach, Sir William Edmonstone, M.P., and Dr. Bartlett.

The chief object of the deputation was to show that the sixth clause would be practically inoperative, and would, in fact, almost entirely neutralise the beneficial results that the Act was framed for the purpose of accomplishing. It was pointed out very succinctly by Lord Percy and Mr. Brudenell Carter (the latter as representing the newly formed Sanitary Institute of Great Britain) that the objectionable clause rendered nugatory all the other provisions of the Act, inasmuch as the members of local boards, who are authorised to put the law in motion, were, in most cases, either the actual polluters of rivers or their representatives. Mr. Sclater-Booth, in replying to the deputation, asked, in effect, that the Act, before being condemned, should have a fair trial, but intimated that the points raised should receive all due consideration.

VACCINATION IN WORKHOUSE SCHOOLS.

IT would be interesting to know what measures are taken in workhouse schools to ascertain, by periodical examination of the pauper children, the number and quality of the vaccination marks they bear, with a view to estimate the degree of protection from small-pox which they enjoy. This is especially important during small-pox epidemic periods, as is evident from a fact reported in the last Weekly Return of the Registrar-General. It appears that during the week ending the 14th instant, the death of a nurse aged fifty-two years, employed at the South Metropolitan District

Schools at Sutton, resulted from small-pox. It is stated that this nurse had never been vaccinated, but was said to have had small-pox in her youth. The risk incurred in such establishments by the employment of unvaccinated attendants appears, at a time like the present, to be worth serious consideration, and renders it all the more necessary that the vaccination marks of the children should be carefully inspected, more especially as a certain proportion of them have arrived at an age when any but the most efficient vaccination begins to lose its protective influence.

THE HEALTH OF LIVERPOOL.

THOUGH—perhaps because—Liverpool is one of the most unsatisfactory towns in respect of its sanitary condition, the Report of its Medical Officer of Health is always one of the most interesting reports of the sort which we encounter. We are glad to say that the Report for 1876, bearing the name of Dr. J. Stopford Taylor, is not less instructive than those we were accustomed to from the pen of Dr. Trench. The deaths were in 1876, 14,347. Comparing this with the report nearest to our hand, that for 1874, there is a difference in favour of the later year, with the larger population, of nearly 2000. The zymotic mortality in 1874 was 4973; in 1876, 3303. In the last year it accounted for 23·0 per cent. of the whole mortality, tubercular disease for 13·5. The chief zymotics were diarrhœa, which caused 694 deaths, measles 688, whooping-cough 490, fever 398, and small-pox which caused no less than 386. A bye-law requires that every case of infection in lodging-houses be reported at once to the medical officer. The deaths of infants below five reached the large number of 6827, comprising 47·6 per cent. of the whole mortality. This is explained by Dr. Taylor as largely due to measles and whooping-cough. But it is very unsatisfactory. The indecency of the condition of the sublet houses does not diminish, if we may compare the number of single rooms inhabited by unmarried men and women in 1874 and 1876—viz., 489 and 652. The houses properly disinfected were 3461. Sulphurous gas is the only disinfectant trusted, and disinfection of all houses is carried out at the public cost.

KING'S COLLEGE HOSPITAL.

WE hear that it is determined to found a Convalescent Home in connexion with King's College Hospital, the necessity for which has long been felt. A considerable sum has already been collected, and it is proposed to attempt to increase the amount by means of a Theatrical Entertainment, which is to be given on the 14th of May at Bridgewater House, by the permission of the Earl of Ellesmere. A very distinguished company of amateurs, including Lady Sebright, the Hon. Mrs. Wrottesley, Lord Ellesmere, Captain Gooch, and Mr. W. S. Gilbert, have volunteered their services for the occasion, thus ensuring a pleasant evening for those willing to assist in furthering a most praiseworthy undertaking.

THE DERBY AND DERBYSHIRE NURSING ASSOCIATION.

THIS association sets an example which may well be followed in other parts of the country. It has been established twelve years, and has done much good work in the way of training nurses and providing nurses for home purposes and for hospitals. In addition to this it has done much charitable work amongst the poor, the scope of which may be gathered from the report read at the recent anniversary by Dr. Ogle, of Derby, the secretary of the Society. In 1876 we learn that 775 families were attended at their own homes, receiving 9433 visits; 5004 dinners had been supplied to sick persons at their own homes, and 475 dinners had been eaten by convalescents at the nurses' home; 4622 puddings and 5852 pints of beef-tea had also been sent out. In addition to the distribution of food, we learn that couches were lent to 62 people, air-pillows to 130, bed-rests to 129, arm-chairs to 61, blankets to 45, counterpanes to 38, waterproof sheeting to 59; 12 bath-chairs or perambulators have been in constant use during fine weather, and various articles of clothing have been given to members of 174 families. This is good and useful work, and we are glad to see that the Society is flourishing as it deserves to do. A nurses' home is to be built, towards which £2000 has already been subscribed, and there can be little doubt that more money will be forthcoming if required.

ORIGIN OF URIC ACID AND UREA.

DR. W. VON KNIERIEM (*Zeitschrift für Biologie*, Band xiii., Heft 1, 1877), from the results he has obtained in a long series of experiments upon the relations of the antecedents of urea in mammals to the organism of birds, draws the following conclusions:—1. During the digestion of protein compounds in the organism of the fowl the same bodies are formed as in the digestion of the proteids in mammals—namely, asparaginic acid, leucin, glycocoll; and these substances constitute the antecedent stages of the formation of uric acid. 2. The antecedent stages to uric acid of the products of decomposition of the protein compounds in mammals, are, with the exception of the salts of ammonia, the same as those which precede the formation of urea. 3. Ammonia salts, which are converted in the bodies of mammals into urea, are eliminated from the bodies of fowls in an unaltered condition, and this explains the much larger excretion of ammonia that takes place in birds as compared with mammals.

PORT SANITARY WORK ABROAD.

WE have just received a file of papers from Halifax, Nova Scotia, giving, among other news, details showing the way in which port sanitary work is carried on in some towns of British North America. It appears that some two months ago the steamship *Circassian* arrived at Halifax from Baltimore. A patient, with the eruption of small-pox thick upon him, was taken out of her, and sent in an open boat to Lawlor's Island, five miles away, where, as might naturally be expected, he died some forty-eight hours after arrival. No steps appear to have been taken to prevent the spread of the disease in the *Circassian*, for she was taken up to the wharf immediately after the departure of the small-pox patient, embarked twenty-five passengers, and sailed the next day for Liverpool. We are curious to know if the *Circassian* in this particular voyage did or did not import small-pox into Liverpool. Perhaps Dr. Taylor can satisfy us, although it would seem, from his first annual report, that the work of the corporation as a port, as distinguished from an urban, sanitary authority, is absolutely nil. Meanwhile, it is unsatisfactory to know that, on account of the apathy or carelessness of colonial sanitary authorities, we may at any time receive from them, in addition to other duty-free goods, chance (if not choice) consignments of epidemic diseases.

HOSPITAL ADMINISTRATION.

WE are glad to be able to record that the Local Government Board, in arranging with the Metropolitan Asylum Board as to the terms of appointment of the Medical Superintendent at the Fulham Small-pox Hospital, calls attention to the order of the Board, dated February 10th, 1875. Article 53 of this order indicates in explicit terms that the senior medical resident officer shall be considered as superintending officer of the establishment.

THE HEALTH OF THE POPE.

Two symptoms preoccupy the attention of the physicians of the Pope—the persistent anorexia and the unrelieved œdema of the lower extremities. On Sunday he was unable to eat more than a little soup, and on Monday, the 16th, he could only masticate, not swallow, a few drachms of underdone meat. The tendency to passive serous effusion is so marked that cerebral mischief from that cause is gravely apprehended. His Holiness has far from refreshing sleep at night, and, during the day, he shows signs of great weariness, only partially relieved by intervals of slumber, into which he relapses in the afternoon and evening. His mental vivacity continues, however, and at the receptions, public or private, which he gives almost daily, he impresses visitors with a stronger belief in his vitality than his state before and after these interviews at all justifies. Meanwhile, he is watched with the greatest vigilance, and Dr. Pelagello, his physician, and Dr. Ceccarelli, his "secret" surgeon, see him alternately at frequent intervals, and hold consultations every twenty-four hours as to the treatment to be maintained or modified.

THE FAMINE IN INDIA.

THE famine in India still assumes alarming proportions. By recent advices, it appears that the Sanitary Commissioner of Madras has again called the attention of Sir Richard Temple to the fact that the present scale of food and wages for the relief labourers is insufficient even to support life, and it is reported that the present rate of mortality in the relief camps is more than 900 per 1000 per annum. The sanitary condition of the city of Madras is still most unsatisfactory, and both cholera and small-pox are increasing and causing much mortality.

COW-KEEPING IN LONDON.

IT is a monstrous oversight of prudence to permit the keeping of cows in London. Lord Sandon recognises the evil, but he is not prepared to remove it. He pleads the magnitude of the question. It seems a very simple matter. The sanitary machinery extant is surely sufficient to enforce the provision of proper dairies in the environs of the metropolitan district, and we fail to see the difficulty of prohibiting the practice of cow-keeping in town. There should be no dairies where cows cannot be fed with fresh fodder and allowed to graze in open fields. Milk-shops there must be in the populous districts, but not dairies.

FEMALE MEDICAL STUDENTS IN RUSSIA.

THE total number of women studying medicine in Russia during the past few years has been 430, of whom 73 were of the Jewish persuasion, 19 Polish Catholics, and 11 Polish Protestants; the rest all belonging to the orthodox faith. They come from all parts of the empire, belong to the middle class, and the majority are between the ages of twenty and twenty-five years, very few exceeding thirty years. The number of married women now studying has reached 78.

THE BURIALS BILL.

IT will be seen (as, indeed, we anticipated) from the columns of our daily contemporaries, that this Bill has already caused a vast amount of discussion throughout the country. The discussions have assumed more of a sentimental than a sanitary aspect, for there can be little doubt that the "health" clauses of the Bill are *per se* judicious. As we indicated last week, it is not our intention to discuss the clauses of the Bill *seriatim* at present. But we may parenthetically register a regret that the radical process of cremation, supported by Sir H. Thompson, or burial in the earth in perishable envelopes, so forcibly urged by Mr. Seymour Haden, does not appear to meet with either sympathy or practical support.

THE IMPRISONED COLLIERS.

As we are going to press news reaches us that the fifteen colliers imprisoned in a *cul de sac* of a mine at Tynewydd have been rescued. Some light soup was supplied to them through a tube passed in by a boring. There is not at the time we write sufficient information before us to justify such remarks as this extraordinary instance of life under the most adverse conditions would suggest. The fact that the men have subsisted during eight days, chiefly, if not exclusively, upon a few candles left in the heading by a miner who escaped, is in itself remarkable and replete with interest. We must defer comment on these matters until the full facts are collected. Meanwhile there can be no hesitation in giving warm expression to the gratification which must be felt at the gallant rescue of these poor fellows, and a high sense of the meritorious exertions by which that liberation has been effected.

WATER FROM THE GREENSAND.

MESSRS. MEUX, the well-known brewers, have obtained an abundant supply of water by piercing to the greensand, which they reached at a depth of about 1000 feet. The fact is of great importance, and will probably lead to fresh borings in other parts of the metropolitan area. The water from the greensand is generally of excellent quality and remarkably soft. It would be good news for Londoners—though not, perhaps, for London water companies—if any large supply of water were shown to be obtainable from this source. We may suggest that inquiries should at once be made by the Metropolitan Board of Works.

THE HABITUAL DRUNKARDS BILL.

THIS Bill will shortly be printed and brought forward by Dr. Cameron. It is in principle identical with that of Mr. Dalrymple, but differs in some points of machinery. We shall revert to the subject in an early number

IN reporting to the Secretary of State for the Home Department on the desirability of diminishing the proportion of those who in Scotland are at present allowed to escape the provisions of the Vaccination Act, the Registrar-General for Scotland suggests that the readiest means of effecting this object is by abridging the period after birth during which parents and guardians may, without incurring penalty, suffer the children for whom they are responsible to remain unvaccinated. In effect an assimilation of the law to that in force in England is proposed. We observe that the percentage of successful vaccinations to births in Scotland for the year 1875 was 87 624.

WE are glad to find that the ratepayers of Andover are alive to their duties in the matter of vaccination. At the recent election of guardians of the parish very strenuous efforts were made to secure the return of two well-known anti-vaccination agitators, but without success. These persons only secured 512 out of a total of 3846 votes recorded. This is satisfactory, since this borough has been the scene of several unfortunate vaccination prosecutions, which, it was feared, might bring the Act into disrepute. The presence of small-pox in the town a few months ago has probably had the desired effect of bringing the lovers of agitation to their senses.

THE New York Hospital, after an interval of six years, has been reopened under the happiest auspices. It may be worth stating that the charter of this institution dates back to the reign of George III., having been granted on June 13th, 1771, by the Earl of Dunmore. The new hospital buildings are said to be admirably situated, and well calculated to serve the purposes for which they have been constructed. A contemporary states that, "as far as equipment is concerned there is nothing to be desired; in fact, the hospital is furnished so regardless of expense as to amount to actual extravagance," but adds, "that this may be considered an error on the safe side, especially so far as it may serve as a rebuke to actual parsimony in other institutions." Accommodation can be given in the different wards to 200 patients. One feature of the hospital is the provision of an ambulance service which will be at the disposal of the police. We wish the New York Hospital a long career of success and prosperity.

MR. G. BROWNING, medical officer of health to the Stockbridge Local Board, in his annual report for the past year, calls the attention of the Board to a very serious matter. It is within his knowledge, he states, that no less than fourteen of the total number of deaths registered in the district have been so registered by means of false (forged is the word Mr. Browning uses) certificates of death, such certificates bearing the signature of a medical practitioner residing at a considerable distance, who not only had not seen the patients during their fatal illness, but whose name was appended to the documents in question without his direct or implied knowledge or consent. Mr. Browning has brought the matter under the notice of the Registrar-General, and he also suggests that the Local Board should, in the interests of the public health, take some steps to prevent a recurrence of such violations of the law.

THE Queen's Bench Division has confirmed the judgment previously given in the case of Lawrence, the East-end "Spiritualist," and that impostor has been re-committed to work out his sentence. In deciding the case, the Lord Chief Justice very plainly repudiated the contention that the *bona fides* of the accused could be a subject of controversy. The offer to produce spirits, other than those sold by quantity, was a false pretence in law and fact, and "it would be most mischievous if practices of this kind, carried on, not for amusement or for the purposes of scientific investigation, but for sordid purposes, were not to be held to come within the terms of the Act directed to obtaining money by false pretences." It is well the case has been finally shelved, and we hope the silly and dangerous figment of "spiritualistic manifestations" may as speedily as possible be exorcised from the public mind.

THE law officers of the Crown—so it is said—have given it as their opinion that although women can be admitted to the degrees in medicine at the University of London, they cannot become members of Convocation. The latter is legally a part of the governing body of the University, and the Enabling Act of last year, under which women can be admitted to degrees in medicine, does not permit them to become members of the governing body of a medical corporation.

IN reference to an annotation headed "Death from a Fall—Orange-peel," which appeared in our impression of March 31st, p. 473, we are requested to state that the deceased was *not* Mr. Richard Kimpton, the well-known medical bookseller, but a son of his; and the death was not, it appears, caused by slipping on orange-peel, as stated in the newspaper report upon which our remarks were founded.

THE annual general meeting of the French Medical Association was held on Sunday, the 8th inst., in the amphitheatre of the Assistance Publique (where the *concours* for the hospital appointments are held) under the presidency of Dr. Henri Roger. There were over two hundred members present on the occasion. Addresses were delivered by the President and Treasurer, the latter announcing that the Association had now a clear million of francs capital in its coffers. In the evening the members met at dinner in the Grand Hotel, where a most exhaustive *menu* had been arranged. On the following evening, Monday, a brilliant *conversazione* was held at the house of the President, Dr. Roger.

IT will be remembered that some little time back a circular was addressed by the Metropolitan Asylums Board to the various local sanitary bodies on the proposed formation of a Board with power to treat all cases of fever and small-pox, whether of the pauper or non-pauper classes. Replies from many of the vestries have been received, and the majority appear to be in favour of forming a central authority as suggested, although there is much difference of opinion as to whether such a Board should be under a department of the Poor Law, or should have the powers of the Sanitary Acts conferred upon it.

WOOLWICH, with a large population, military and civilian, appears to be now enjoying comparative immunity from zymotic disease. Last month there was not a single death from this class of disorders in the town, while in February there was but one death recorded from such cause. The condition of the town reflects credit on the local board of health, and should be a source of gratification to the military authorities.

THE Church collections on Hospital Sunday this year in Liverpool amounted to £7538, against £7660 obtained last year. The Hospital Saturday collections reached £2413, a sum considerably above the amount received in 1876. A sum of £9650 will be distributed to the medical charities of the town, the Royal Infirmary coming in for the largest share.

MR. NEWTON H. NIXON, at present on the staff of the School Board for London, has been appointed secretary of University College Hospital. The position was open to public competition, and there were 184 candidates.

ROYAL COLLEGE OF PHYSICIANS.

A MEETING of the Fellows was held on Monday.

Censors.—Dr. Quain was elected senior and Dr. Fincham a fourth censor, in place of Dr. Peacock and Dr. Bristowe respectively.

Conjoint Scheme.—The amended scheme for an Examining Board for England was considered, together with the amendments proposed by the University of Cambridge. The amendments were as follows:—Section 6 to read as follows—viz.: "That the Committee of Reference consist of two representatives from each of the medical corporations and universities of England." Clause 2, section 8, to read as follows—viz.: "To nominate on each occasion double the number of persons required to be appointed as examiners." New section to follow section 12:—"That the scheme of Conjoint Examinations terminate at the end of ten years from the date of its sanction by the General Medical Council and do then cease, unless renewed." The first two proposed alterations were agreed to. In the discussion upon the third suggested amendment in the scheme many objec-

tions were taken to its acceptance. It was said that the proposed amendment indicated a want of heartiness, and a lack of faith in the success of the scheme itself which would act most injuriously; that there was no necessity for such a clause in the scheme, because section 12, as it stands at present, enables any of the co-operating medical authorities to withdraw at any time after the expiration of a period of five years; that its effect upon the Scotch and Irish bodies might readily be very baneful, inasmuch as it would furnish them with a reason for not co-operating, because they might say that in England an experiment only was being tried for ten years; and, lastly, that such a clause would not satisfy the Government or the Medical Council. The College passed a resolution declaring itself unable to accept this last section suggested by the University of Cambridge, and asking the latter body to withdraw the particular section. In this respect the College has taken a similar line to the College of Surgeons and the University of Oxford.

Admission of Foreign Graduates to Examination.—The following resolution was come to by the College, but it will need to be passed at a second meeting to have any force as a bye-law:—"Any candidate for the College licence who shall have obtained a degree in medicine or surgery at a British college or foreign university recognised by the College, after a course of study and an examination satisfactory to the College, shall be exempt from re-examination on such subjects as shall in each case be considered unnecessary. That the Censors' Board be requested to lay before the College a statement of the exemptions to be granted to the graduates of such universities."

The College then adjourned.

CONGRESS OF GERMAN SURGEONS.

THE opening meeting of the sixth Congress of the Society of German Surgeons took place on the 4th inst., in the Aula of the University of Berlin. Professor von Langenbeck presided, and there were some two hundred members present; amongst these were Professors Bardoleben (Berlin), Billroth (Vienna), Busch (Bonn), Esmarch (Kiel), Gurlt (Berlin), Heine (Prague), Hueter (Greifswald), Lücke (Strasburg), König (Gottingen), Thiersch (Leipzig), Trendelenburg (Rostock), and Volkmann (Halle). The visitors included Messrs. Ogston (Aberdeen), Chavasse (Birmingham), Tanner (Cork), and Dennis, Welch, Wiggin, and Williams (New York), &c.

The preliminary business having been transacted, Prof. von Langenbeck was permanently elected President by the unanimous vote of the Society.

The PRESIDENT, after having welcomed the members, said it was his sad duty to bring before the Society the loss the surgical world had sustained during the past year by the deaths of Chelius, Fergusson, Stromeyer, and Simon. A short tribute having been paid to the memory of the first three, Prof. von Langenbeck went on to say that, with regard to Simon, the Society had lost one of its former presidents, and, as Dr. J. Marion Sims had said, "one who for a quarter of a century had always been prominently before the profession, and always as the standard-bearer of an onward movement: his name is the synonym of progress, and his fame will endure for ages." In conclusion, he called upon the meeting to show respect to the memories of these four celebrated surgeons by rising *en masse*. This was at once done in an impressive manner.

The first speaker on the programme was Dr. HUETER, who took for his subject Partial Excision of the Elbow-joint. The speaker expressed himself strongly in favour of partial resections for traumatic cases, as well as for disease; and thought that more useful limbs and a lower death-rate were obtained after a partial than after a total excision of the joint. A discussion followed, in which all the speakers agreed that it is better to be as conservative as possible when the elbow-joint is undergoing treatment.

Dr. BUSCH (Bonn) advocated alkaline washes, solutions of soda, in the treatment of cancer of the face. He stated that he thought by using these lotions he had been instrumental in curing a large number of cases that had come to him in an early stage of the disease, before ulceration had taken place.

Professor LÜCKE brought before the Society the subject of percussion of bone. The speaker claimed that, after a little practice, osteomyelitis and other diseases could with facility be diagnosed, by comparing the note elicited on percussing the affected parts with that given by the normal texture.

Dr. GUSSENBAUER showed, by means of diagrams and photographs, a new operation which he had invented for curing large defects in the walls of the mouth. This was rather complicated, and required four separate sittings before the operation could be completed.

Mr. OGSTON read a paper on the operative treatment of Genu Valgum. After demonstrating, by means of a drawing, Annandale's operation, Mr. Ogston proceeded to explain a plan that he had lately adopted for treating this affection, and which consisted in making a small incision through the skin, from two to three centimetres above the internal condyle of the femur, with antiseptic precautions. Mr. Adams' saw is then introduced through the wound thus made, and a piece of the condylus internus is sawn through obliquely; after this has been done the leg is straightened. Three cases treated in Aberdeen in this manner have been entirely successful. In the discussion which followed upon the paper the majority of the speakers appeared favourably impressed with this idea; but the President remarked that he had had good results in some cases of genu valgum by simply dividing the external lateral ligament of the joint.

This closed the first day's meeting, and a number of the members afterwards dined together at the Kaiserhof Hotel.

SECOND DAY.

In the morning the members met in the theatre of Dr. von Langenbeck's Hospital.

Professor HUETER gave a microscopical demonstration on the circulation of a dog's blood previously poisoned by septicæmia.

Dr. WINCKEL (Dresden) brought forward a patient upon whom he had operated for a large hydronephrotic cyst, and in whom a fistula connected with the kidney now existed.

Professor VOLKMANN showed a patient who had received a bullet-wound while engaged in a duel at a distance of ten paces. The ball had entered the head of the tibia, splintered it, and remained impacted; as it was being extracted, air was heard to enter the joint, showing that a fissure extended upwards into it. Antiseptic dressings were used, and the man recovered with the perfect use of the joint.

Dr. RANKE (Halle) narrated some facts in connexion with penetrating wounds of the large joints, twenty-four cases in all, which had been treated strictly according to Lister's method; all had made good recoveries.

Dr. SCHEDE (Berlin) showed several children in whom the head of the femur had been excised for disease of the joint; the results of his treatment were excellent.

The afternoon meeting took place in the University.

Professor VOLKMANN brought before the Society the results of three years' antiseptic surgery in his clinique at Halle. These statistics showed that in 139 uncomplicated cases of amputation there had been only four deaths. In 91 uncomplicated cases where excision of joints had been performed, 21 of these being of the knee and 48 of the hip, there was only a mortality of five. In 50 cases of osteotomy one patient had died. Of 119 operations on the mamma, six had proved fatal. Twenty-four cases of wounded joints showed no death.

Dr. BUSCH (Berlin) spoke of the value of cochineal feeding when experimenting on the growth of bone.

Dr. ZIEMSSEN (Wiesbaden), when speaking on the treatment of constitutional syphilis, expressed his belief, after personal investigation, that the baths of Aix-la-Chapelle were valueless, if relied upon solely. He advocated the scraping out of small gummata, as a method of expediting their cure.

Dr. MENZEL (Triest) showed diagrams, and spoke upon the spermatozoa found in the fluid of spermatoceles.

THIRD DAY.

The morning meeting was held in Professor von Langenbeck's clinique.

Professor ESMARCH demonstrated six specimens of Excision of the Head of the Humerus.

The PRESIDENT brought forward a boy, twelve years of

age, who, when younger, had suffered from Spina Bifida, the tumour being as large as a fist. The case was successfully treated by means of weak injections of tincture of iodine. At the present time only a slight retraction of the parts in the region of the first sacral vertebra is visible, development of the bones having taken place. The same gentleman also exhibited a patient, upon whom he had successfully performed the operation of œsophagotomy, for the purpose of removing some false teeth which had been swallowed during an epileptic fit.

Professor VOLKMANN showed a child upon whom he had antiseptically performed resection of the knee-joint. Healing had taken place very rapidly.

Dr. KÖNIG exhibited a splint for the after treatment of excision of the knee-joint. The novelty consisted of a pair of semilunar hoops, on which the leg and whole apparatus could be balanced.

Dr. SCHÖNBORN (Königsberg) demonstrated a specimen taken from a case in which he had performed gastrotomy, but the patient had died from cancer of the œsophagus. An interesting debate followed, the speakers narrating cases they had seen. Drs. Billroth and Trendelenburg had both successfully operated.

Dr. RANKE and Dr. ISRAEL each showed a case of echinococcus of the liver. In both cures had been effected.

In the afternoon the members assembled in the University to hear Professor ESMARCH speak upon the Treatment of Cancer. A large number of drawings were exhibited, showing the various cases that had been met with during the course of Dr. Esmarch's professional career. He advised that cancers of the tongue, and also most of the malignant growths, wherever occurring, should be treated by means of arsenic and iodide of potassium, internally and externally, before proceeding to an operation. The speaker had frequently seen cancer originating upon a syphilitic basis, and often where the syphilis had remained latent for a long period—from twenty to forty years. The lecture closed by an appeal to each member to collect all the material in his power, and so see if it were not possible, by a division of labour, to arrive at some definite conclusions on the question of malignant neoplasms.

FOURTH DAY.

The morning sitting of the last day was held in the theatre of the surgical clinique of the Charité Hospital. The Emperor of Brazil was introduced by the President, and remained during the two hours the meeting lasted. His Majesty afterwards was shown over the hospital, and seemed much pleased with what he saw and heard.

Dr. BURCHARDT showed a modification of Esmarch's Wound Irrigator, which was especially intended for army purposes, as it would close up when required.

Dr. GENZMER exhibited a Sarcoma of the Dura Mater which had been extirpated by Prof. Volkmann. The patient died from air entering the longitudinal sinus. At the post-mortem the right auricle of the heart was found to contain air. The same gentleman showed a patient on whom he had applied an articulated isinglass bandage, after excision of the elbow, with good effect.

Dr. ROSE (Zurich) related some cases where he had excised the thyroid gland, and advised that tracheotomy should always be first performed.

Dr. BUSCH (Bonn) demonstrated two specimens of Retro-pharyngeal Tumours; the one, a lipoma, was the size of a fist, the other was a lympho-sarcoma. Both had been removed through the mouth with successful results.

At the closing meeting it was arranged that 1000 marks should be given from the funds of the Society towards the erection of Stromeyer's monument in Hanover.

On the motion of Professor Volkmann it was agreed that a copy of each of Simon's publications should be purchased for the library of the Society.

A letter in the name of the British Medical Association was read by the President, inviting members of the Congress to take part in the Association's annual meeting, which is to be held in Manchester during the month of August.

It was then decided that at the future meetings of the Congress, one day should be set apart for demonstrating operations on the cadaver.

After this Dr. KÖNIG made some statements on fractures of the neck of the femur. Specimens were produced and handed round.

Professor HEINE spoke at some length on the operative treatment for Pseudarthrosis, and showed a new apparatus for retaining the ends of the bone in apposition; this consisted of a clamp with small side teeth, which grasped the bones laterally, and could be tightened to any requisite degree.

The PRESIDENT next showed to the Society some specimens of subperiosteal surgery, which Professor James R. Wood, of Bellevue Hospital, New York, had expressly sent over to the Congress by his house-surgeon, Dr. Wiggin. The object of chief interest was an inferior maxilla, which had been completely regenerated after excision. The patient was a young woman eighteen years old, who suffered from phosphoric necrosis of the lower jaw, the result of working in a match manufactory. The whole inferior maxilla was affected, and the entire bone was removed subperiosteally at two separate operations. The patient made a good recovery, and returned to her former occupation, but died three years later from cerebral abscess. Dr. Wood was fortunate enough to obtain the whole skull. The new maxilla was small, but complete and symmetrical, and must have proved of great benefit to the patient. By the side of the preparation the necrosed jaw which had been removed was displayed. The President stated he had operated in four cases for phosphoric necrosis of the inferior maxilla, and showed specimens and photographs of patients in whom the bone had been reformed. These cases proved that the newly produced jaws remain, although it was an admitted fact that in subperiosteal excision of the superior maxilla there was only slight new osseous formation. He thought that if the whole inferior maxilla was to be taken away it was better to do so by two operations rather than by a single one, as if the jaw is removed altogether at once, retraction is apt to follow. In conclusion, he thanked Professor Wood for his kindness in sending his specimens to Germany.

This being the last business, the President declared the Congress adjourned.

THE SMALL-POX EPIDEMIC.

DURING the week ending 14th inst., 77 fatal cases of small-pox were registered among the seven millions of persons estimated to be living in twenty of the largest English towns; in the four preceding weeks the numbers in those towns had steadily declined from 114 to 85. Of these 77, 60 occurred in London, 8 in Liverpool (excluding two fatal municipal cases in Toxteth Workhouse), 6 in Salford, 2 in Manchester, 1 in Brighton, and not one in any of the fifteen other towns. The Registrar-General remarks that all the six fatal cases in Salford occurred in private dwelling-houses, and that five were of children under one year of age, of whom one was certified to be unvaccinated, and the rest were "not stated" as to vaccination. These facts point to great neglect of vaccination in Salford, and indicate a marked increase in the fatality of small-pox upon that which had prevailed in the borough during the ten preceding weeks. The fatal case in Brighton was of a child aged nine years, in the Union Workhouse, the medical certificate containing no information as to vaccination. Brighton still unaccountably neglects to provide a hospital for the isolation of cases of infectious diseases.

The deaths referred to small-pox in London during the three weeks ending the 14th instant, were successively 86, 78, and 60. The Registrar-General points out that the latter number was lower than that returned in any week since December last. Of the 60 fatal cases, 31 occurred in hospitals, and 29 in private dwellings. After distributing the hospital cases, it is reported that 14 of the deceased small-pox patients had resided in Bow and Poplar, 7 in Southwark, and 4 in Kensington. The disease is still fatally prevalent in East London, especially in Bow and Poplar, whereas the fatality showed a decided decline in most other parts of London. In the outer-ring of suburban districts, 16 deaths from small-pox were returned in the week ending the 14th inst., against 10 and 11 in the two preceding weeks; 12 of these occurred in West Ham and Stratford, 2 in Edmonton, 1 in Croydon, and 1 in Sutton.

Although the decrease in the deaths from small-pox in London appears to augur the approaching decline of the epi-

demic, it is unsatisfactory to note that the number of small-pox patients in the Metropolitan Asylum Hospitals did not show a corresponding decrease; they were 930 on the 14th instant, against 988 and 956 at the end of the two preceding weeks. Further, the number of new cases admitted during the week was 228, and fully equal to those admitted in each of the previous weeks. The proportional mortality in these hospitals appears to be declining, indicating that the disease is beginning to assume a less fatal type.

Correspondence.

"Audi alteram partem."

THE MORBID CHANGES IN CHRONIC BRIGHT'S DISEASE.

To the Editor of THE LANCET.

SIR,—With your permission, I will reply very briefly to the letter of Sir William Gull and Dr. Sutton on the above subject, which appeared in THE LANCET of March 31st.

In that communication the authors state that "whilst the appearance of a *thickened* middle coat of the arterioles is undeniable, a true hypertrophy—viz., an increase of proper normal muscle-elements—is not proven, and perhaps, with our present data, cannot be proved." To this I reply, that if the increase of the muscular elements of the middle coat to twice or three times the normal amount, without the slightest evidence of textural change, in arterioles whose uniform normal size and thickness are thoroughly well known, such as the afferent vessels of the Malpighian bodies, be not considered proof of a true muscular hypertrophy, it is difficult to see that any anatomical evidence can be conclusive proof of hypertrophy, whether of the arterioles, or of the heart, or of any voluntary or involuntary muscle. I maintain that we have the same anatomical evidence of hypertrophy of the muscular elements in the walls of the arterioles as we have of the associated hypertrophy of the muscular walls of the heart.

In this case, however, the evidence is not only anatomical but physiological also. The researches of modern physiologists have enabled us to see that increased contraction of the arterioles, with resulting hypertrophy of their muscular walls, affords an explanation of the arterial tension and the cardiac hypertrophy of renal disease, both acute and chronic, which the theory of arterio-capillary fibrosis is utterly inadequate to give.

The statement that "the clinical history of chronic Bright's disease is not that of a mere renal affection," is one of those self-evident propositions which probably not one amongst your numerous readers would be found to dispute. That Bright's disease in any form does not begin in the kidney is as much a truism as that gout does not begin in the great toe, or small-pox in the skin. No clinical observer, I suppose, would deny that in some cases before the onset of kidney disease other organs and tissues may, from various causes, have undergone structural change; but that any form of Bright's disease is only part and parcel of a general arterio-capillary fibrosis, is not only "not proven," but is in a very high degree improbable.

I am, Sir, your obedient servant,

Saville-row, April 14th, 1877. GEORGE JOHNSON.

"DENTAL REFORM."

To the Editor of THE LANCET.

SIR,—I beg to enclose a copy of a letter of resignation which I have felt it necessary to place in the hands of the Committee of the Dental Reform Association—an association which it is hoped will conduce to the improvement of the dental branch of the profession.

The ground of my objection, and consequent resignation, is an amendment to one of the resolutions, considered carefully and passed at a meeting of the executive committee, and submitted to the general committee, proposed by Mr. Turner, and carried, "That qualified surgeons engaged in dental practice, but who have not thought it necessary to take the licentiateship, shall be debarred by law, and under penalty, from styling themselves surgeon-dentists, dental practitioners, or dentists." Such a measure would, to my mind, be inconsistent and illiberal, and one not likely to advance the profession socially or intellectually. It has been strongly impressed upon members of the Council of the College of Surgeons, that the suggestive resolutions which some months since were submitted to them for consideration by the Association of Dental Surgeons, to which I belong, was signed without authority. This is a mistake which, I trust, arises only from want of knowledge of the facts of the case. At a general meeting, at which a large number of the Association attended, the resolutions were drawn up and unanimously adopted, and it was equally unanimously carried that the names of the members should be appended. I *in toto* deny having an underhanded intention to degrade the licentiateship; but I feel that an attack has been made upon medical degrees, which seems to me to be short-sighted policy, and I do not think that vulgar journalism will mend matters. With your permission, I may write further on this subject.

Your obedient servant,

April 19, 1877. SAMUEL CARTWRIGHT.

TWISTING OF THE PEDICLE OF AN OVARIAN TUMOUR.

To the Editor of THE LANCET.

SIR,—The fact that occasionally an ovarian or even par-ovarian tumour will rotate and strangulate its pedicle has been so often recorded that it is accepted as one of the complications of this disease. No explanation has yet been given of the mechanism of the rotation, but no case of its occurrence after tapping has been recorded, with the exception of the interesting case given last week by Dr. Malins. It may, however, be doubted if his explanation is satisfactory, and the condition of the patient on Feb. 16th is suggestive that the twisting had then taken place and that the process of gangrene was beginning. Tapping would take the pedicle off the stretch and allow the blood once more to flow, so that the gangrene would be arrested or limited, and the patient would improve, as she did. It is difficult to understand how a flaccid cyst could offer any leverage by which its pedicle could be twisted so tightly as to cause strangulation. The partial gangrene of the cyst seen at the operation might well be the result of the arrested process, and that the tapping was other than beneficial, or that it caused the rotation in any way, is a view not supported by the facts narrated.

I am, &c.,

F.R.C.S.

THE RELATIONS OF MEDICAL OFFICERS OF HEALTH TO PRIVATE PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—I send you a copy of a letter received from the Local Government Board, in reference to the dispute between Dr. Charles Kelly and myself, in the matter of his repeated visits to my patients, and take this opportunity of thanking you for your able advocacy of the case, to which is due much of the success.

Very truly yours,

Horsham, Sussex, April 18th, 1877. HENRY J. ASHBURNER.

(COPY.)

Local Government Board, Whitehall, S.W.,
16th April, 1877.

SIR,—I am directed by the Local Government Board to advert to the letter which you addressed to them on the 23rd of February last, inquiring whether the medical officer of health for the Rural Sanitary District of the Horsham Union has the right to visit a person who is an inmate of the workhouse of that union, and alleged to be suffering from small-pox.

The Board having given the subject their consideration, direct me to state that they are of opinion that a medical officer of health has no right to visit a patient in a work-

house against his wish, or against the wish of those who have the charge of him.

I am, Sir, your obedient servant,

J. F. ROTTON,
Assistant Secretary.

T. Bedford, Esq.,
Clerk to the Rural Sanitary Authority
of the Horsham Union.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

Monday, April 16th.

THE DEATH OF MR. GEORGE WOOD, OF CHELSEA.

IN reply to Mr. Serjeant Simon, Mr. Secretary CROSS intimated that he did not intend to institute any special inquiry into the death of Mr. George Wood, the inquest and verdict in that case being satisfactory.

LONDON DAIRIES.

Sir George Bowyer elicited from Lord SANDON an avowal that the Privy Council is cognisant of the deplorable condition of the London dairies, but is unprepared to deal with the matter as its urgency demands.

DEATH OF A PRISONER DISCHARGED FROM GAOL.

The HOME SECRETARY, in reply to Mr. Parnell, answered that there would be no further inquiry in the case of the discharged prisoner Farrell, who died after leaving Walton Gaol. An inquest had been held, and a verdict of death from small-pox returned. There had also been an inquiry at the prison, and no suspicious circumstances had occurred.

Tuesday, April 17th.

VACCINATION.

Mr. SCLATER-BOOTH, in answer to Mr. P. Taylor, said: I am generally aware that Mr. Pearce, of Andover, has been frequently proceeded against for non-compliance with the Vaccination Acts. My opinions on the subject are well known, having been embodied for the most part in a letter to the Evesham guardians, which has been laid on the table, and they have been communicated to the guardians and to the magistrates at Andover. These authorities, in the exercise of the discretion which the law vests in them, have continued proceedings, and I have no right or power to interfere further. It is said that Mr. Pearce is an active member of the Anti-Vaccination Society, and that, not content with declining to observe the law himself, he stimulates others to do the same, and, moreover, that his fines are paid by the Association. In the face of the existing epidemic, I am not aware that the Government could usefully propose to take any step in order to stop further proceedings, or that Parliament would be prepared to sanction any such attempt.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Licentiates of the College on the 16th inst.:—

Baker, John Henry, Hockley.
Beverley, William Henry, Albany-street.
Cane, Howard, Queen-square.
Cusack, Robert Oriel, Bedford.
Farbstein, Henry, Hull.
Forrest, John George Stracey, Bessborough-gardens.
Gay, Charles William Ebenezer, Townsend, St. Albans.
George, George Aldridge, Albert-street.
Job, John, Dowlais.
Jones, Roger Hughes, High-street, Denbigh.
Layborn, William Kirkus, Grafton-street East.
Lee, Charles George, Liverpool-road, Chester.
Le Quesne, Edwin Joseph, Metropolitan Free Hospital.
May, Arthur William, South Petherwyn, Launceston.
Munro, Alexander, M.D. Montreal, Woburn-place.
Patmore, Tennyson Deighton, Gower-street.
Pickering, Charles Frederick, Guy's Hospital.
Reynolds, William Percy, Berkeley Lodge, Norwood-road.
Sandwith, Fleming Mant, York-road.
Sherrin, Francis Mark, University Hospital.
Steele, Henry Frederick, Dispensary, Carlisle.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At the last meeting of the Council, the following Member was elected a Fellow of the College:—

Robert Bowie Walcott, M.D. Lond., Barbadoes, West Indies.

The following gentlemen passed the primary examination in Anatomy and Physiology at meetings of the Board of Examiners on the 13th, 16th, 17th, and 18th inst.:—

E. Russell Cree, James T. James, Fallow P. Wightwick, and E. Wenham Alden, Middlesex Hospital; Henry T. Preston, Charles C. Shepherd, George L. Pardington, William T. Freeman, James Mudge, Henry C. Nance, Edw. M. Cuffe, Jas. D. Priest, Arthur Franklin, P. A. Holland, D. Astley Greswell, Thomas H. T. Mudge, George E. Fooks, Gilbert H. Barling, Arthur J. Wharry, Anthony A. Bowlby, and Gerard Mackee, St. Bartholomew's Hospital; William T. Crew, Harold E. B. Flanagan, W. Hall White, Leonard C. Wooldridge, Frederick F. Jones, James T. Bishop, Herbert E. Wright, and Edwin O. Jago, Guy's Hospital; Arthur E. Permawan, Arthur E. Buckell, Charles J. Bond, Percy E. Shearman, B. Harris Mumby, Reginald Pratt, Angel Money, Francis H. Saunders, William Pasteur, John F. Easmon, and James J. Paddle, University College; John Davidson, J. F. W. Silk, Norman Dalton, Arthur T. Slozgett, William J. Penny, and John H. Nankivell, King's College; A. M. Sheild, Cecil L. S. Branson, Frederick J. Bennett, Thomas V. Dickinson, Arthur O. Evans, George A. Buckmaster, Charles A. Webb, and Fredk. C. Fisher, St. George's Hospital; Jakaki Kanehiro, Robert J. Boyd, Herbert A. H. Fenton, Thomas Fort, Sidney F. Harvey, Fredk. W. Lerew, Charles B. Richardson, George S. Hatton, Arthur Purkiss, D. S. Davies, Francis W. Sutton, and Ho Kai, St. Thomas's Hospital; Joas H. Fialho, Bombay and University College; Theodore D. Acland, Leipzig, Oxford, and St. Thomas's Hospital; Edward J. H. Midwinter, Samuel E. Pritchard, and Alton K. Hoets, London Hospital; Walter H. Day, Charles Curde, and Frederick W. Brookes, Charing-cross Hospital; Arthur M. Davies, and G. H. Butler, Westminster Hospital; Edward Little, Belfast and St. Bartholomew's Hospital; C. D. Adam and Andrew Baird, St. Mary's Hospital.

Of the 96 candidates examined on the above-named days, 17 failed to satisfy the Board, and were referred for three months' further anatomical and physiological study.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on April 12th:—

Blackmore, Alfred, Quay-street, Manchester.
Lawless, Edmond Jas., Cadogan-terrace, South Hackney.
M'Gachen, Fredk. Wm. Dobson, Bethnal-green.
Steele, Charles Edward, Rodney-street, Liverpool.

The following gentlemen also passed the Primary Professional Examination:—

Thomas Desmond Gimlette, St. Thomas's Hospital; Morton Alfred Small, St. Mary's Hospital.

[The address appended to the name of Harold Gilbertson Taylor, in the list published last week, should have been Queen's-road, Bayswater.]

ROYAL COLLEGE OF PHYSICIANS IN IRELAND.—The following gentlemen obtained the licences in Medicine and Midwifery at the April examinations:—

MEDICINE.—John Alfred Freud, William Huey, Laurence Joseph O'Neill.
MIDWIFERY.—John Alfred Freud, Lawrence Joseph O'Neill.

THE next meeting of the Yorkshire Association of Medical Officers of Health will be held in the board-room of the infirmary, Halifax, on Wednesday, April 25th, 1877.

HER Royal Highness the Duchess of Teck has consented to be present at the opening of the new East London Hospital for Children at Shadwell, on May 2nd.

MR. BENJAMIN CRAWSHAW, medical officer to the Odd Fellows, Margate, has been presented with a silver salver, bearing a suitable inscription, and a white silk emblematic sash, by the members of the lodge, on the occasion of his marriage and departure from the town.

AT the workhouse, Bancroft-road, Mile-end, an inquest was held on the body of a woman, aged fifty-five, who expired during the severe storm that raged on the 4th inst. It appeared that the deceased was the subject of heart disease, and the terror inspired by the lightning was so great as to produce a sudden fatal termination to her malady. A verdict in accordance with this view was returned.

VIVISECTION.—It appears from a return just issued that twenty-three licences have been granted under the Act of last year to amend the law relating to cruelty to animals. Four of these are for Cambridge University, two for Edinburgh University, one for the Edinburgh Veterinary College, one for the Glasgow Royal Infirmary, one for the Gloucester County Asylum, one for 22, Queen Anne-street, Marylebone, five for University College, London, one for King's College, London, two for Guy's Hospital, one for Oxford University, and four in which no place is specified. Twenty-two of the licences are for experiments in illustration of lectures, and one of them is for experiments without anæsthetics. The latter is for Cambridge Museum, and the inspector under the Act has to satisfy himself, at the expiration of three months from the grant of the certificate, as to the painless nature of the experiments.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The seventh meeting of the twenty-first session was held on Friday, April 6th, at the Royal Kent Dispensary, Greenwich-road, W. Johnson Smith, F.R.C.S. (senior V.P.), in the chair. Resolutions expressing sympathy and condolence with the widows and families of the late Dr. W. Carr and Mr. David Hope were unanimously agreed to. Dr. G. Roper, read a paper on Post partum Illness in general and Pelvic Cellulitis in particular.

HOSPITAL FOR SICK CHILDREN, NEWCASTLE-ON-TYNE.—There was a numerous attendance of the friends of this institution at the annual meeting held on the 13th inst. The medical officers' report stated that there had been 98 in-patients during the year. These, with 14 from the previous year, made 112 patients that had been under treatment. Forty-one had been cured, 44 relieved, 8 incurable, 1 removed by its mother, and 18 remaining over. There had been 1881 out patients—a rather smaller number than that of the previous year. The annual report stated that there were three vacancies in the medical staff, Dr. Hume and Dr. Lynn's second term of office having expired, and Dr. Machlachlan having resigned his appointment as physician. Not a single death occurred in the house. The financial statement, which was satisfactory, having been read and adopted, Dr. Drummond was elected physician, and Drs. Barron and Page surgeons.

BIRMINGHAM MEDICAL INSTITUTE.—The third annual meeting of this Society was held on Thursday, the 29th ultimo. Dr. Fletcher, the retiring President, occupied the chair, and about forty other members were present. The annual report showed that the Institute was now established on a sound basis, and that during the last year considerable progress had been made in its organisation. Commodious rooms had been occupied on lease for a series of years in Queen's College; a reading-room had been opened; the library had been augmented by several thousand volumes, by gift or purchase, and considerable progress had already been made in cataloguing the books. The report further showed that the finances were satisfactory. The following are the officers of the Institute elected for the ensuing year:—President: Dr. Bodington. Vice-Presidents: Mr. Crompton and Mr. Berry. Hon. Secretaries: Mr. G. H. Evans and Mr. Priestley Smith. Hon. Librarians: Mr. L. Tait and Mr. W. Bates. The following retiring members of the committee were re-elected, viz.:—Dr. Fletcher, Dr. T. Underhill, and Mr. W. C. Garman; and Mr. C. J. Bracey and Dr. Savage were elected to the two other vacancies.

Medical Appointments.

AHERN, J., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Attendant to the Royal Irish Constabulary, Ballyvourney, co. Cork, vice Kent, deceased.

ANDERTON, W., L.R.C.P.Ed. & L.M., L.R.C.S.Ed., has been appointed Medical Officer for the Ormskirk District and the Workhouse of the Ormskirk Union, vice Symonds, resigned.

BETTS, J., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the All Saints' District of the Maldon Union, vice Roe, resigned.

BRADFORD, P., L.R.C.P.L., M.R.C.S.E., L.S.A.L., has been appointed House-Surgeon to the Chorlton-on-Medlock Dispensary, vice McLaughlin, resigned.

BURKE, R. J., M.D., has been appointed Medical Officer, Public Vaccinator, &c., for the Douglas Dispensary District of the Cork Union, vice Crofts, resigned.

COYNE, F. K., L.K.Q.C.P.I. & L.M., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, &c., for the Kilcock Dispensary District of the Celbridge Union, co. Kildare, vice Wade, deceased.

CRAN, J., M.B., C.M., has been appointed Assistant Medical Officer to the Royal Lunatic Asylum, Aberdeen, vice MacRitchie, appointed House-Surgeon to the County Hospital, Huntingdon.

DOUGLAS, R., M.B., C.M., has been appointed Medical Officer to the Lead Company's Workmen's Medical Union, Nenthead, Alston, Cumberland.

DUNSTAN, E., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Stokesay District of the Ludlow Union, vice Jones, resigned.

GREEN, E. F. S., M.B., C.M., has been appointed Admiralty Surgeon for Aldborough (Southern portion), vice Dunlop, resigned.

GWATKIN, O., M.R.C.S.E., L.S.A.L., has been appointed Senior House-Surgeon to the Royal Southern Hospital, Liverpool.

HADDEN, L., M.D., L.F.P.S.G., has been appointed Medical Officer and Public Vaccinator for the Parish of Falkirk, Stirlingshire, and the Workhouse, vice Espie, deceased.

JONES, C. S., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Singleton District of the West Hampnett Union, Sussex, vice Turner, resigned.

MACKINTOSH, A., M.D., L.F.P.S.G., L.M. & F.M.S., has been reappointed Medical Officer of Health for the Urban Sanitary District of Whittington, Derbyshire.

MARSHALL, J., M.B., C.M., has been appointed Resident House-Surgeon to the Brecknock County and Borough General Infirmary, vice North, resigned.

MIDDLETON, G. S., M.B., C.M., has been appointed Resident Medical Officer to the Partick, Hillhead, and Maryhill Hospital, at Hillhead, near Glasgow.

MORRIS, G., L.R.C.P.Ed. & L.M., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the newly-formed Skelmersdale District of the Ormskirk Union.

MUNDY, Mr. E., has been appointed Assistant House-Surgeon to the Rotherham Hospital and Dispensary, vice Brett, resigned.

NORTH, J. C., M.B., C.M., has been appointed a Physician to the Brecknock County and Borough General Infirmary.

PIGGOTT, E. A., L.R.C.P.Ed., L.R.C.S. & L.M.Ed., L.S.A.L., has been appointed Medical Officer to the Royal Mail Company's steamship *Mondego*.

RICHARDS, Mr. D. H., has been appointed Public Analyst for Oswestry.

ROUGHTON, W., L.R.C.P.L., M.R.C.S.E., has been appointed Junior House-Surgeon to the Royal Southern Hospital, Liverpool.

ROWORTH, A. T., M.R.C.S., L.S.A., has been appointed Visiting Medical Officer of the *Exmouth* Training-ship, at a salary of £100 per annum.

SANDERS, T., F.R.C.S.E., L.S.A.L., has been appointed Medical Officer for No. 7 District of the South Molton Union, vice Traill, resigned.

WARD, J. L. W., L.R.C.P.Ed. & L.M., M.R.C.S.E., has been appointed Medical Officer to the Merthyr Tydfil Union Workhouse and Infirmary, vice Biddle, appointed to the Merthyr Tydfil District.

WEARING, R., M.B., C.M., has been appointed Second House-Surgeon to the Royal Southern Hospital, Liverpool.

Births, Marriages, and Deaths.

BIRTHS.

CANTON.—On the 14th inst., the wife of Frederic Canton, L.R.C.P.L., of Anerley, of a son.

FRY.—On the 15th inst., at Wateringbury, the wife of John William Fry, M.R.C.S.E., of a daughter, who lived only a few hours.

KERR.—On the 15th inst., at Grove-road, Regent's-park, the wife of Norman S. Kerr, M.D., of a daughter.

MCCONVILLE.—On the 16th inst., at Elmbank-crescent, Glasgow, the wife of John McConville, M.D., of a son.

ROE.—On the 16th inst., at Lower Baggot-street, Dublin, the wife of William Roe, M.D., of a son.

ROPER.—On the 9th inst., at Granville-park, Blackheath, the wife of Arthur Roper, M.R.C.S.E., of a son.

TURNBULL.—On the 7th inst., at Kelso, the wife of Dr. G. H. Turnbull, of a son.

WARD.—On the 15th inst., at Saltburn, Twickenham-common, the wife of Martindale C. Ward, M.D., of a daughter.

WINTERBOTHAM.—On the 12th inst., at Arundel House, Bays-hill, Cheltenham, the wife of Lauriston Winterbotham, of a son.

WOODFULL.—On the 14th inst., at the residence of Colonel Taylor, her father, the wife of Samuel Pratt Woodfull, M.R.C.S.E., Surgeon-Major, of a daughter.

MARRIAGES.

BRYAN—BRYAN.—On the 12th inst., at St. Luke's Church, Leicester, by the Rev. G. Bryan, Vicar of Huttoft, Lincolnshire, uncle of the bride, assisted by the Rev. W. R. Waters, Rector of West Bridgeford, Nottinghamshire, uncle of the bridegroom, and the Rev. S. Flood, Vicar of St. Luke's, Clement Frederic Bryan, M.R.C.S. &c., of Spagardee, Leicester, to Ellen Louisa Harriet, youngest daughter of the late Thomas John Bryan, Esq., of Lyddington House, Rutland.

NOOTT—HICKMAN.—On the 18th inst., at St. Luke's Church, Wolverhampton, by the Rev. John Parry, assisted by the Rev. E. H. L. Nootts, William Matthias Nootts, of Cardigan, to Louisa, eldest daughter of Alfred Hickman, of Goldthorn-hill, Wolverhampton.

WATERWORTH—WORSLEY.—On the 3rd inst., at St. Luke's, Shepherd's-bush, Edward Allan Waterworth, M.D., of Newport, Isle of Wight, to Rosetta Ann, daughter of the late Francis Worsley, of Coppins House, Newport.

DEATHS.

BABINGTON.—On the 12th inst., at Bedford, Arthur Wellesley Waterloo Babington, M.R.C.S.E., Deputy Inspector-General of Hospitals and Fleets, aged 59.

BARNES.—On the 14th inst., at Mayow Lodge, Sydenham, the residence of her son, Eliza, the beloved wife of J. Wickham Barnes, F.R.C.S., of Bolt-court, Fleet-street, and Stanwell Moor, Middlesex, aged 43.

BRODIE.—On the 13th inst., at Rothbury, Malcolm Brodie, L.R.C.P.Ed.

BROWN.—On the 13th inst., at Strathaven, Lanarkshire, Hugh Brown, M.D.

EDWARDS.—On the 10th inst., at St. Mary's, Scilly, Alfred Edwards, M.R.C.S.E., aged 28.

HAWETT.—On the 14th inst., at his residence, Standishgate, Wigan, Thomas Hawett, Esq., M.R.C.S.L. & L.S.A., aged 77. R.I.P.

MOORHEAD.—On the 5th inst., at Simpson's Hospital, Dublin, William Moorhead, M.D.

PRATT.—On the 3rd inst., at the residence of her son, Octavius Pratt, of Cardiff, Mary Ann, relict of the late Charles Edward Pratt, M.D., formerly of Appledore, North Devon, and sister-in-law to the late John Tidd Pratt, Barrister-at-Law, and Registrar of Friendly Societies, aged 77.

SKINNER.—On the 14th inst., at Winchelsea, David Skinner, M.R.C.S.E., aged 73.

WILLIAMS.—On the 14th inst., at Lime House, Abertillery, John Jones Williams, Surgeon, aged 62.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

DIVERSE DISPENSING.

It is a small matter perhaps that the same prescription dispensed at different chemists' shops should produce mixtures of slightly diverse colour or taste, if the important ingredients are accurately compounded. Syr. aurantii flavoured with bitter or sweet orange-peel can scarcely be supposed to affect the medicine. Nevertheless, as persons who require the aid of drugs are usually hyper-sensitive, it would be well if at least the leading pharmaceutical chemists could arrive at some common understanding as to what these secondary ingredients of a mixture should be. Our attention has been called to the annoyance and even distrust occasioned by diverse methods of dispensing the same prescription, and we can readily believe the difference has produced disquiet hurtful to patients and vexatious to physicians. We commend the subject to the attention of pharmaceutists, and particularly some of the leading firms to whose establishments the public repair with confidence it is undesirable to shake.

Dr. Wilson Charitis, (U.S.A.)—The matter is one for a solicitor. Our correspondent will readily find a legal practitioner in America who has business relations with this country.

Miss Nixon.—We regret we cannot assist our correspondent in the matter.

LUNACY LAW REFORM.

To the Editor of THE LANCET.

SIR,—With reference to the letter on the above subject in your last issue, I quite agree with your correspondent, "A Medical Superintendent of Fifteen Years' Standing," in the opinion that the present opportunity should not be lost of bringing before the Committee of the House of Commons on the Lunacy Laws certain questions relating to the superannuation of officers, attendants, and servants in asylums.

This question of superannuation, which is at present in a very uncertain and unsatisfactory position legally, might have been taken up by the Medico-Psychological Association; but for practical objects like superannuation the said Association has hitherto been of little use. This question has lately been under the consideration of the superintendents of Irish asylums with a view to some improvement, and the superintendents of Scotch asylums are at present taking energetic measures for the improvement of their position as regards superannuation.

There are three points that appear to me to be deserving of consideration and amendment.

1. The first point is that raised by your correspondent, the present uncertainty as to the discretionary powers vested in the Committee of Visitors (subject to confirmation or rejection by Quarter Sessions) of granting pensions not exceeding two-thirds of salary and allowances. There is great uncertainty as to the amount of pension to be granted, and I believe that in very many instances asylum officers, attendants, and servants do not receive anything like two-thirds of their salary and allowances, even after lengthened service, prolonged in many cases much beyond the time mentioned in the Act.

In the civil service I believe they are not under the same uncertainty as to pension, there being a fixed pension after a certain term of service. I have yet to learn that service in the army, navy, prisons, police, and poor-law departments is more arduous, more anxious, and attended with greater risk than lunatic asylum service. On the contrary, I maintain that there is no service so trying, so anxious, and attended with so much risk as lunatic asylum service.

Asylum officers and servants, if deserving, ought not, therefore, to be at the caprice or discretion of a magistrate or magistrates, who frequently are ignorant of the value of the services of the applicant for pension, and who cannot realise to the full extent the trying nature of the duties of such asylum service.

2. Another hardship is that service in one county does not reckon towards pension for service in another county, so that meritorious officers or servants going from one asylum to another have to start afresh so far as pension is concerned. This operates injuriously. Under the present Lunacy Laws this cannot very well be altered; but should asylums ultimately be placed under the control of Government (like prisons), this hardship might be remedied, and public asylum service in any county should reckon towards pension. This principle is admitted in the Poor-law (Scotland) Bill, now before the House of Commons. Clause 35 empowers Parochial Boards and Committees to grant to officers superannuation allowances, subject to certain provisions, one provision being the following:—"In computing the period of service, any period of service as a Poor-law officer in any character to any parish or combination may be reckoned along with any other period of such service in any other character, and to any other parish or combination."

3. Some more certain interpretation is required with regard to the meaning of the words "servants," "in," and "of," an asylum referred to in the Lunacy Acts. The almost invariable practice in English county asylums is to treat the word "servants" in a liberal spirit, and to include all classes of asylum servants in the benefits of superannuation; but it occasionally occurs that exception is taken to this liberal interpretation of the Acts, and I know of instances where it was contended that the clauses in the Lunacy Acts relating to pensions were only intended to apply to officers and attendants who are brought daily in contact with the patients, and were not intended to apply to artisans, workmen, and house-servants, whose duties do not bring them so much in contact with the insane. This latter view appears to be held by the Lunacy Commissioners, although it is certainly contrary to the general practice in English county asylums.

Yours truly,

April 17th, 1877. ANOTHER MEDICAL SUPERINTENDENT.

OUR CANAL POPULATION.

MR. BAKER, in the lately issued half-yearly Reports of Inspectors of Factories, deals with the social position of our canal population. The only thorough remedy Mr. Baker sees for evils which we have ourselves frequently depicted is to forbid by law any child under ten years of age, and any female whatever, to be found in any canal-boat on any canal or any river connected with a canal, and that no bargee shall be permitted to leave any wharf on any voyage without a certificate from his employer, testifying that no prohibited person was on board the boat for any purpose whatever, and that such bargee should be bound to produce on demand such certificate to any lock-keeper or other authorised person along or about any navigable canal, under a penalty of £5, or, failing such penalty, imprisonment. We hope something will be done in the direction indicated by Mr. Baker in the course of the present session.

Magnir.—The nails should be dipped in a strong solution of aloes.

TAPEWORM.

To the Editor of THE LANCET.

SIR,—It has been my fortune to treat a case of tapeworm during the past three years that may interest some of your readers, inasmuch as it shows the difficulties in treatment and the inefficacy in this case of certain drugs, whose action is said by their advocates never to fail. Another point of interest in the case is the absence of all symptoms of tapeworm, and, in fact, more than the absence of symptoms, as the patient kept improving in physique and excelling in athletic sports whilst the parasite was passing from his body.

On the 6th of June, 1873, I was consulted by C——, aged twenty-two, a robust young man, who complained "that bits of something kept coming away from him as he walked about." He had been given salt-and-water injections, being told he had "threadworms." Upon examination I found he had tænia solium, so I commenced my treatment by ordering him to fast from 12 A.M. that day till the same hour next day, and gave him early the following morning ninety grains of kamela (getting it fresh from a wholesale druggist). Upon his bowels being moved he passed a piece of the worm about a foot long, but not the head. I then allowed him to eat a light lunch only, and the following morning increased the dose of kamela to 120 grains; but, although he followed out my instructions most religiously, there was no further effect so far as the worm was concerned. I must also mention that on the third day he took another dose of kamela on his own account, but without any preliminary fasting, and without success.

To save time and space, let it be remembered that in all the following administrations of medicine, fasting, as in the first instance, was strictly observed.

On the 10th of July, a month later, the patient came to me for further treatment. This time I gave him infusion of kousso in six-ounce doses for three mornings, followed by castor oil. Some pieces of worm were expelled during the first two days; on the third none. A week later this treatment was repeated, but without success, and, owing to the nausea, I was obliged to discontinue it, even had I any desire to proceed further with the drug.

On Sept. 14th, 1874, he again consulted me for the same affair, pieces coming away occasionally, as of old. In appearance he was the picture of health, and had increased in weight 8 lb. since I last saw him, his weight at this time being 178 lb. I now decided to try filix mas, giving him forty minims of the liquid extract in the morning, preceded the night before by a dose of castor oil, and followed by another dose. After the first dose over six feet came away, but I could not discover the head. The result of this attempt encouraged me to make four more trials with the male fern during the following six weeks, the dose being increased to one and two fluid drachms; but, with the exception of a few pieces after the second dose, no more was expelled. The next medicine I tried was oil of turpentine in one fluid ounce doses, followed by castor oil; result *nil*. My patient was now in despair, saying he knew he was bound to have it for life, and refused to be treated any longer.

I did not see him after this till April 3rd, 1876, when I induced him to let me have another try at his "old enemy," it being as active as ever. I might mention that he told me that the only time he ever knew what it was to be sick was when he took my medicine. He now weighed 182 lb., was on the first eleven of his cricket club, and was also a representative player of his foot-ball club. Thirty minims of filix mas and one ounce of oil of turpentine was now given, which he threw up immediately. After waiting for a fortnight, I tried this again, this time having it put up in capsules, and followed it with a dose of castor oil. To my delight over twelve feet of the worm was expelled, with the head. I have since given him the tincture of perchloride of iron, and now over eight months have gone by without any sign of the reappearance of the worm.

I remain, Sir, yours &c.,

Montreal, Jan. 12th, 1877. R. F. GODFREY, M.D.

Phœnix.—We have no means of knowing whether any large number of women will be so misguided as to fall into the trap set for them by the folly of the London University and one or two of the licensing bodies. This is not, however, a matter which can affect the prospects of a young man purposing to enter the profession, supposing his general education and ability to be of an order justifying the hope of success on general principles.

AN INSTITUTION WANTED.

To the Editor of THE LANCET.

SIR,—I should like to hear of any institution of a private description for the reception of a patient suffering from hemiplegia of the left side, where a moderate weekly payment would secure the comforts and medical treatment suited to such a case, and one which at present seems likely to be benefited by treatment and hygienic measures in about six months. The patient is married, and their very limited means tempts me to seek such an institution for the husband, who had an epileptiform se zure about three weeks ago, followed by paralysis. I should feel much indebted for any information the profession could afford, and remain,

Yours obediently,

Gamlingay, Cambs, April, 1877. HENRY TRIMMER.

THE HOMES OF THE POOR.

THE inquiry—conducted by Mr. D. C. Nichols—into the condition of what is called the Golden-lane area, St. Luke's, in view of putting into effect the Artisans' Dwellings Act, has revealed a deplorable state of things in the district in question. In Brackley-street, for instance, according to the testimony of Inspector Payne, the people threw slops to the bottom of their houses, the staircases being so broken away that it was unsafe to descend them; and the water-supply was stored in dirty butts situated in cellars. Mr. Minchin had seen three beds in a room nine feet square, "those living in it being littered down like pigs." In Silver-street the closets were under the pavement. Many of the people took in laundry work, and dried the clothes in the one room in which they lived. The result of the inquiry, which occupied nearly three days, is not yet made known; but from the evidence adduced we should think there can be no doubt of the need of the application of Mr. Cross's Act to the Golden-lane area.

P. should report the case to the Registrar-General, and to the President of the General Medical Council, which has the subject under consideration.

ON CURRENT MEASUREMENTS IN ELECTRO-THERAPEUTICS.

To the Editor of THE LANCET.

SIR,—Mr. de Watteville accuses me in your last issue of "having made an astounding mistake as to facts" (!) in saying that the galvanometer is no accurate gauge of the amount of the current actually administered to a patient. The context of my last letter will prove that I referred to its inutility in testing a battery current about to be applied to a patient, the only method, practically, by which it can be used in fully 95 per cent. of applications; for I am within the mark in saying that an electrisation admitting of the galvanometer being included in the circuit of a continuous current, as in your correspondent's illustration of aneurismal electro-puncture, is indicated in barely 5 per cent. of ordinary cases in electro-therapeutics. Had not both Mr. de Watteville and Mr. Mann advised the *habitual* employment of the galvanometer as a measure of doses—as universally, in short, as, according to their own letters, drachms and grains are used in ordinary prescriptions—I should not have troubled you with any correspondence; but Mr. de Watteville goes yet further, and recommends it as "enabling the patients to carry on treatment at home" (!). The prospect of the ordinary patient provided with a battery, the use of which he is complicating by a galvanometer, is anything but reassuring to those physicians who have had frequent experience of the way in which patients misunderstand, or fail in correctly carrying out, the most explicit directions. Mr. de Watteville asserts that the experiments I reported "have evidently been made far too hastily to carry conviction into any mind accustomed to the scientific precision of experimental methods." If this be so, it undoubtedly strengthens my case; for if not accustomed to "scientific precision," I may at least claim to be able to use a galvanometer as perfectly as the majority of ordinary practitioners, for whose benefit, I suppose, Mr. de Watteville's letters have been written; for assuredly he could not have addressed you to teach scientific experts the properties of a galvanometer! Let any of your readers ascertain the percentage of cases in which physicians who are themselves in the habit of applying electricity use the galvanometer—such men as Althaus, Buzzard, Gowers, and Poore,—and I shall be much mistaken if it is not found to be a very small one.

I am, Sir, your obedient servant,
Cavendish-square, W., April 16th, 1877. HERBERT TIBBITS.

Dr. Thos. Kelly.—For the Primary Examination for the Fellowship: Ellis's Anatomy, Quain and Sharpey's Anatomy, Balfour and Foster's Embryology, Foster's Physiology, or Hermann's Physiology. For the Final: Holmes's or Erichsen's Surgery, Green's or Rindfleisch's Pathology, Paget's Lectures on Pathology, Billroth's Pathology, Leishmann's Midwifery, Sidney Ringer's Therapeutics, Roberts's Medicine.

Mr. E. Pope.—We have no means of ascertaining "the relative death-rate of the Turk and the Englishman." The former have many qualities tending to longevity, chief among which is their undoubted temperance in eating and drinking.

DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—In reply to the inquiry on this subject in your last issue, I beg to inform "A Young Surgeon" that I have for the past three years used carbolic acid and iodine, either painted on the affected part or in spray, to the fauces, with the best results. When the case is severe, the throat looks angry, and the patches of lymph are extensive, I have never known the second formula of carbolic acid and iodine combined fail to remove the false membrane, and to cleanse the throat in a remarkably short space of time. No. 1. Carbolic acid, spirits of wine, of each 100 parts; tincture of iodine, 50 parts; distilled water, 500 parts. No. 2, which I call lin. iodi carbolici. Rectified spirits of wine, one drachm forty minims; tincture of iodine, fifty minims; carbolic acid, one drachm two scruples; distilled water, one ounce twenty minims. Local remedies not being practicable in the treatment of young children, I always begin with an emetic, keep the air of the chamber moistened with steam (and carbolic spray occasionally), and give a mixture, which is not disagreeable, composed of chlorate of potash, and either hydrochloric acid or tincture of perchloride of iron, with syrup. With the above bases for my treatment, the results have been very satisfactory.

I am, Sir, yours truly,
Peterborough, April 16th, 1877. W. THOMSON, M.D.

To the Editor of THE LANCET.

SIR,—In reply to the letter of "A Young Surgeon" about the treatment of diphtheria, I would wish to inform him I have known great and immediate benefit to be derived from the application of sulphur to the throat in the form of a gargle when possible, and, where not, from its use either by blowing it through a quill or applying it by a feather; its fumes may be moderately inhaled also.—Your obedient servant,

WALTER F. C. BARTLETT,
April, 1877. Staff Surgeon, Royal Navy.

PROFESSIONAL DIFFERENCES.

To the Editor of THE LANCET.

SIR,—I feel somewhat reluctant again to occupy space in your valuable columns; but after reading the letter in to-day's LANCET, signed P. D. Hopgood, I have no alternative. The question of Mr. Hopgood's breach of faith has been decided by your editorial remarks last week. The question of medical etiquette has yet to be dealt with. Mr. Hopgood, smarting under the publication of his letters and actions, tries to reverse the tables by making some remarks upon the bad odour &c. into which he says I have brought myself with the guardians (?). The case he alludes to (which, by-the-bye, is irrelevant to anything between him and me) solely appertains to the Board of Guardians, and is best explained by the enclosed letter from me to the Local Government Board.

Stow-on-the-Wold, Jan. 18th, 1877.

MY LORDS AND GENTLEMEN,—In reply to your letter received this morning concerning the matter at issue between the Board of Guardians of Stow-on-the-Wold and myself, respecting the case of the pauper Williams. On October 14th, 1876, I received an order from the relieving officer to attend the pauper Isaac Williams, residing at Upper Slaughter; and on the following morning, Sunday, 15th, I made a special visit (a distance of three miles) to see him. I was then told by himself and his sister that he had been ill for some weeks, and was under the care of Mr. Moore, a neighbouring surgeon, residing at Bourton-on-the-Water; that they did not require me to attend him professionally, but requested that I would order for him some meat and wine. This I declined doing, my professional services not being required. On October 29th I received another order from the relieving officer, and on the day after paid Isaac Williams another special visit. He was downstairs, and he told me he was not going to take any more medicine, Mr. Moore having told him he did not require any, and again repeated that all he wanted of me was to give him an order for meat and nourishment. I again declined doing so, and on leaving told him if he desired me to attend him professionally I would do so upon his sending; but I would not be played the fool with, as he was doing. I heard nothing further of the case until I received a letter from the clerk to the Board, a copy of which I enclose. To this I gave no written reply, but attended the next meeting of the Board on December 21st. To my surprise I found the pauper Williams, his wife, and sister were there, and after hearing their evidence I was admitted. I stated my case as now reported; and upon my readmission to the Board, the Chairman informed me that the Board considered that I had committed a very "grave offence" in neglecting to attend to the orders of the Board; that they required me to acknowledge that I had done so, and that for the future I would engage to attend to all such orders. To having committed the "grave offence" of not having attended to the orders of the Board I most emphatically declined to acknowledge. I stated that if I had committed an error, I had done so by simply not having reported the case in my district book; that I had not neglected the orders of the Board, the case having been visited by me upon both orders; that my reason for not having reported the case in my district book was that the man was under the care of another practitioner, consequently I had nothing to do with the case; that the man evidently desired to make me only the medium to obtain what he could of meat and nourishment from the Board. I expressed to the Board in strong terms that they should support their medical officers better than they were in my case evidently doing.

I have the honour to be,
My Lords and Gentlemen,
Yours obediently,
To the Local Government Board. FRED. E. PEARSE, M.D.

On January 19th I applied for an increase of salary, tendering my resignation in the event of refusal, and, relying implicitly upon the good faith of Mr. Hopgood, my resignation was accepted. Unfortunately this appears to have quashed the probable Local Government inquiry, and on Feb. 16th I wrote to the Local Government Board, praying that the inquiry may be still instituted. On Feb. 27th I received the following.

[COPY.]

Local Government Board, Whitehall,
27th February, 1877.

SIR,—I am directed by the Local Government Board to acknowledge the receipt of your letter of the 16th instant, referring to the circumstances under which you resigned the office in the Stow-on-the-Wold Union, and requesting the Board to inquire into the charge of neglect preferred against you in the case of Isaac Williams. I am directed to state that, as you have resigned the office of medical officer in the Stow-on-the-Wold Union, there is no ground for any further proceedings being taken by the Board in the case referred to, inasmuch as you have ceased to be an officer under their control or jurisdiction. It would be altogether contrary to the general practice of the Board to comply with your request.

I am, Sir, your obedient servant,
HUGH OWEN, Jun., Assistant-Secretary.

Mr. Hopgood is quite correct in saying that I offered myself for re-appointment; but he omits to state that it was only at the increased salary. I am not surprised at his endeavours to shield himself under Mr. Hayward's name; for, as an old practitioner here, Mr. Hayward bears a name of undoubted honour and straightforwardness; and when I met Mr. Hayward in the hunting-field, he said he hoped Mr. Hopgood would act up to his agreement. I must deny that "nearly all intimated they would not sit at the Board if Dr. Pearse was re-elected." Possibly Mr. Hopgood hears privately what is denied publicly, as the press are not permitted within the board-room; but some guardians to whom I have spoken do not corroborate his statement.

To the last query, "Is it just for Dr. Pearse after his resignation to be vaccinating the paupers?" I would reply that no public vaccinator has been appointed, and I was requested by many to vaccinate their children. Even had there been one, I should not have declined when desired to do so by the parents.

Mr. Hopgood is, and has been, doing the work of the district at the old salary, after having pledged himself to me (according to his own showing) that he would not do so. If this is the manner in which he would uphold the etiquette and dignity of our profession, it is rather for me to say "it would be impossible for me to work with Mr. Hopgood."

I am, Sir, yours faithfully,
Stow-on-the-Wold, April 14th, 1877. FRED. E. PEARSE, M.D.

TILBURY FORT.

THE water-supply of Tilbury Fort some time back was very defective in quality, causing some amount of ague and malaria among the men stationed in the place. Surgeon-Major Faught, in a report dealing at some length with the subject, now before us, states as a curious fact that neither the railway nor the coastguard men suffer from ague or malaria as the troops in Tilbury Fort do, and that when a battery stationed at the Fort is put under the same conditions as regards their water-supply as the officials named, their health at once improves. Since the report was written, matters have greatly improved in Tilbury Fort.

L.F.P.S.G., &c.—A chemist calling himself "doctor" can be prosecuted for the assumption of a title implying that he is a registered medical practitioner.

CASE OF "MALIGNANT PUSTULE."

To the Editor of THE LANCET.

SIR,—Not unfrequently rare cases both in medicine and surgery occur in the practices of country medical men; and as their opportunities of bringing them before the Medical Societies are so scanty, it is fortunate that there are medical journals in which they can be chronicled. Three such cases having happened lately in my practice, I thought it might be well to publish them in the pages of THE LANCET.

The first is a case of malignant pustule, and this is so rare a disease in England that Bryant says "he has no personal experience of it." Pirrie gives a short and concise history of the malady. Watson, in his fourth edition, and Niemeyer only mention it. Aitken and some French authors, however, give a fuller account of the disease, and say it can only be cured in its early stage.

It has been my misfortune to witness two cases, one in 1873, which terminated fatally in five days; and another during the past month, which I shall shortly describe.

I was desired to visit Mrs. P—— in the evening of the 23rd of March, living seven miles from my house. The note stated that she had taken a chill on the previous Monday, and had now an attack of erysipelas coming on round her mouth. I reached the farm-house about 7 P.M., and found the patient sitting before the fire, with a handkerchief round her mouth and head. Upon removing it I noticed a black eschar upon the outer part of the red portion of the upper lip; the region surrounding it was swollen, and had upon its surface a number of little pustules; the infiltration extended under the lower jaw, and the whole was becoming dusky in colour. There was but little pain, and upon my cutting into the diseased portion no suffering was experienced. The pulse was quick, and symptoms of debility were setting in. I desired that plenty of port wine might be given to her and strong beef-tea; and, having the experience of my last case before my eyes, ventured to express my opinion (much to the surprise and grief of the friends) that death would soon ensue.

Next morning I drove over to the house, and found the patient in bed, evidently sinking; the pulse could hardly be felt; her countenance was pinched and bluish, and she died about an hour afterwards, retaining her consciousness to the last.

Yours &c.,
April, 1877. F. E. RYOTT, M.D., F.R.C.S.

Dr. Sargent.—Lumley's Manual illustrating the Consolidated Order probably contains more information in a small compass, and conveniently arranged for ready reference, than any other work. Special matters relating to the duties of medical officers and medical work generally are discussed in the notes. The subject is a great one, of daily increasing interest, and requires to be studied practically all round. There is an opportunity for special usefulness, which our correspondent would do well to embrace.

WHY SHOULD MEDICAL MEN DISPENSE?

To the Editor of THE LANCET.

SIR,—In your editorial note to the letter of "M.D. Univ. Edin.," you admit the time has not yet arrived when general practitioners should give up dispensing their own medicine. I beg to go further, and express the hope that the time may be far distant—at any rate while druggists are not better qualified than at present to act as such; my two principal reasons being: (1) The satisfaction to the medical man himself that his medicine is compounded accurately, and of drugs fresh and reliable in quality; and (2) the satisfaction afforded the patient by knowing the medicine comes direct from the medical attendant. These two reasons have more weight with me than any such sentimental ideas as are suggested by stating that all doctors in Edinburgh prescribe only. Considering the amount of practical work in relieving all sorts of suffering that falls to the lot of the general practitioner, it seems to be an absurd bit of false sentiment to suppose that he who is above dirtying his fingers with drugs is more likely to do his duty in allaying and preventing suffering than he who thinks it no degradation to do so. A general practitioner who prescribes only is *not* necessarily a more scientific follower of the art of healing than he who also compounds, and, in fact, I believe is often apt to get his ideas of the action of drugs narrowed, and to slip into the habit of uniformly prescribing a certain remedy for a certain disease. The wholesome feeling of trust and confidence that an English family has in their medical man seems to me to be a good deal mixed up with the idea of the medicine coming direct from his own hands, and we cannot afford to ruthlessly sweep away such feelings for the sake of becoming more "like a professional gentleman."

Yours truly,
Crouch End, N., April 13th, 1877. M.D. DUR. UNIVER.

P. L. S.—We do not see that it would necessarily be the duty of the physician, after seeing a case with one general practitioner, to refuse to see the same case with another general practitioner, always supposing that there is nothing obviously rude or unreasonable in the conduct of the patient or his friends. We must always admit the patient's right and that of his friends to change either his physician or his general adviser. We must even respect the freedom of patients, and magnanimously fall in with it. We gather that the suggestion to call in another general practitioner emanated from the family. It would, of course, be a very different thing if it emanated from the physician.

ANALYSED TEA.

THE Analysed Tea Association have submitted several samples of tea to us, accompanied by certificates of analyses made by Dr. Redwood, who is attached to the Association in the capacity of analyst. The analyses prove the tea to be pure and genuine, while we can ourselves speak of its excellent flavour. The teas are packed in sealed bottles and tins of 1 lb. to 8 lb. each. The Association profess to supply the finest teas that can be shipped from India and China, and guarantee each lot free from adulteration.

"A MEDICAL CORONER'S PARTNER."

To the Editor of THE LANCET.

SIR,—In a letter signed "Chirurgus" in your impression of to-day, headed as above, you are asked two questions, and your answers are just, reasonable, and fair.

As I was on March 26th last asked to see a man dying from most acute tetanus, and as coroner held an inquest on the man, and summoned my partner to attend the inquest, I cannot but think that your correspondent must allude to me as the medical coroner. I thank "Chirurgus" for having written to you. My partner is as honourable a man as there is in the profession, and has no more to do with the office of coroner, either directly or indirectly, than "Chirurgus" himself.

As to the second case, the child being overlain by the mother, the facts are as follows:—On the 26th of January last I met a respectable young man about a mile out of the town, who stopped me and said, "I was just going to your house to ask you to go and see Mrs. King's child that had died suddenly." I replied, "If the child is dead it is no use my going." I inquired the age of the child, and when I was told it was only five weeks old, and knowing the Kings to be very respectable people and old patients, I was surprised; and feeling sure Mrs. King must have had a medical man at her confinement, I said to the messenger (Mrs. King's brother, who knew me very well, although I did not at first know him), "You must have made a mistake; you could not have been told to come for me." He replied that he was told to come to my house, and ask me to go. I then asked him who attended Mrs. King in her confinement. He said she never had had a doctor, and no doctor had seen the child. I then told him to go to the police constable, and give him notice of the death of the child, and to tell him he need not come over to Buckingham.

If another medical man had attended Mrs. King at any time I was not aware of it. Had I been, I should have sent him a summons to attend the inquest—my universal practice.

As to my impartiality. Last November a patient of mine, well known to my partner, and who had some time previously been attended by him for a slight ailment, was found dead in his garden, hanging to a tree. I was sent for to see him. An assistant of a medical man in the town saw him a few minutes before I did. I summoned the medical man who first saw him.

I am, Sir, your obedient servant,
Buckingham, April 14th, 1877. ROBERT DE'ATH.

Mr. Moore, (Cann.)—The Secretary should have forwarded the "medical" form for our correspondent to compare with that he was asked to fill up. He would then have seen that the two are very different. It may seem absurd to ask a "friend," professional or lay, indifferently, whether a proposer has had visceral disease; but the questions submitted were, in fact, those commonly addressed to any person whose name the proposer gives as a reference. It is a mistake to allow patients to refer to their ordinary medical attendant as a "friend." Our correspondent will, however, find that the case he has submitted to us is not one of those instances in which by some contemptible artifice it is sought to obtain a medical opinion without fee. It would be impossible to stigmatise that practice too strongly. Meanwhile it is pleasant to know that the present is not a case in point. The correspondence shall be returned.

FŒTAL DEFORMITY.

To the Editor of THE LANCET.

SIR,—On Feb. 20th I delivered Mrs. P——, aged twenty-nine, of her first-born child, which presented signs of having perished some time previously, the epidermis of the extremities being loose and easily peeled off. In addition to being unusually small, the fœtus also presented the following peculiarities:—The shoulders and upper arms were covered with dark hair, about an inch in length. The parietal bones were absent, as also the greater portion of the frontal, the occipital, and the squamous portion of the temporals. The brain was absent. The spinal cord terminated abruptly at the foramen magnum; its branches and investing membranes were normal, its dura mater being continuous with a dense membrane that closely invested the bones at the base of the skull, and formed the only representative of the membranes of the brain. The base of the skull was further covered with a vascular membrane, continuous at its circumference with a circular band of hairy scalp that connected it with the integuments of the face and neck. The optic nerves were found to terminate in a small optic commissure, from which two small bands of nerve substance proceeded backwards, and were lost on the dura mater. The other organs were well developed.

The mother was an exceedingly nervous, weak woman, and ascribed the deformity to a fall over a dog, which occurred about the fourth month of pregnancy.

This is the second case of the kind that has occurred in my practice since February, 1875.

Yours faithfully,
March 15th, 1877. H. H.

"POMPHOLYX."

To the Editor of THE LANCET.

SIR,—The disease described by Mr. Cottle in your issue of to-day does not seem to be true pompholyx, but a vesicular eruption becoming bulbous from the vesicles being confluent. Small-pox may be discrete and confluent, but the latter is still small-pox. I have seen cases answering to Mr. Cottle's description, more especially in hot weather; but these have been due to alterations in the sweat-ducts and glands, and this, I think, explains their greater prevalence in hot weather. The sweat-glands are secreting largely, are more or less congested, and the ducts are easily compressed and closed, resulting at times in the formation of papules, vesicles, and bullæ. The majority of the patients were, in the cases under my notice, anæmic and out of health. The disease is sometimes very obstinate.—Yours truly,

Hampstead, April 14th, 1877. FRED. S. ALFORD.

TASTELESS SOLUBLE PEARL-COATED PILLS.

WE have received from Messrs. Gale and Company, Bouverie-street, a priced catalogue and formulæ of these pills, together with several specimens of the same, among which we may more particularly specify the pil. camphor. monobrom. and pil. phosphori co. The latter pill has a non-resinous basis, and is readily soluble in cold water. (It will be remembered that we published several letters lately, in which complaints were made of the insolubility of phosphorus pills.) Messrs. Gale's catalogue contains all the pills of the British Pharmacopœia, with a selection from the formularies of the London hospitals.

C. F. L.—The rule varies in different places, and our correspondent should act according to the local rule. In the country it is customary for the new-comer to call upon the residents.

MORPHIA FEVER.

To the Editor of THE LANCET.

SIR,—Your correspondent, "M.R.C.S.," wishes for the experience of others upon the above subject. I therefore send for insertion in your journal some facts that came under my notice in the use of the injection of morphia to my wife, prescribed by a very eminent physician for spinal neuralgia. The amount injected was half a grain twice a day. After using it for about eighteen months, a curious attack of fever came on suddenly one day; pulse very quick; face highly flushed; pupils contracted; heart agitated; extreme pain over the forehead, with a sense of burning in the head. The attack passed off in a few hours, and the body resumed its normal state. The injection was renewed the following day. Three months after, the same attack came on, if anything rather more severe; symptoms the same. Feeling alarmed, I called upon Dr. B. W. Richardson, and stated the case to him. He described the cause of the attack in a very clear and assuring way. It is nearly three years ago. I give you his explanation as nearly as I can recollect, which was, "that the capillary vessels became weakened by the continued use of the morphia injection, hence regurgitation of the blood to the heart followed, which caused the symptoms I described; that I must at once discontinue the injection, and give, instead, the syrup of bromide of morphia with small doses of strychnia twice a day." I have done this for nearly three years with the happiest result.

Yours faithfully,

April 16th, 1877. F.R.C.S.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Murchison; Mr. Henry Smith, London; Dr. Macnamara, London; Mr. Winterbotham, Cheltenham; Dr. Waters, Chester; Dr. Gillespie, London; Mr. Willmore, Stockbridge; Messrs. Duncan and Sons, Cardiff; Mr. O'Rorke, Tredegar; Mr. Parsons, Goole; Mr. Marshall, Brecon; Mr. Ralston, Ardsheelach; Mr. Moore, London; Mr. Clare, Manchester; Mr. Larkhirst, Blackheath; Dr. Thomson, Westgate; Miss Nixon, Bayswater; Mr. Alford, Hampstead; Mr. Taylor, Bayswater; Mr. Bartlett, Falmouth; Mr. Jackson, Chislehurst; Mr. Kimpton, London; Dr. Carpenter, London; Mr. Erson, Belper; Mr. Wilkinson, Hornsey; Mr. Moxhay, Reading; Mr. Sargent, London; Mr. Browning, Oughtibridge; Mr. Ryott, Newbury; Mr. Moore, Preston; Dr. Hitchcock, Lewisham; Mr. Eaton, London; Dr. Adams, Deeside; Mr. Lawson Tait, Birmingham; Dr. Nicolson, British Guiana; Dr. Crowther, Hobart Town; Mr. Kent, London; Messrs. Livingstone, Edinburgh; Dr. Spalding, Maine, U.S.A.; Mr. Robinson; Mr. Sharpe; Dr. Wilson, Glasgow; Dr. Ashburner; Mr. Trimmer; Mr. Lammiman, Tunbridge Wells; Mr. Ley; Mr. Hallowes, Leek; Mr. Green, Alderton; Mr. Gibson; Mr. Turner, Rotherham; Mr. Beaver; Mr. Evans, Birmingham; Dr. Piggott; Messrs. Hodson and Cribb; Messrs. Waterman & Co., New York; Dr. Drew, Egham; Mr. De'Ath; Mr. Bramley; Dr. Bradford, Manchester; Dr. Dale, King's Lynn; Mr. Page, Newcastle-on-Tyne; Mr. Davies, Boston, U.S.A.; Mr. Dougal; Mr. Young; Dr. Marshall, Nottingham; Dr. Pearse, Stow-on-the-Wold; Mr. Clarke, Derby; Dr. Forte; Mr. Ingpen; Dr. Laver, Colchester; Dr. Hughes, Bakewell; Dr. Boyes; Mr. G. Williamson, Halifax; Dr. Patterson, Glasgow; Dr. Macleod, Glasgow; Mr Rich, Croydon; Mr. Edwards, Hereford; Mr. H. Forman, Ware; Mr. Graham, Stornoway; Mr. Harris, Dublin; Mr. Hendry, Whitchurch; Mr. Evans, Uppingham; Mr. Waterton, Shrewsbury; F.R.C.S.; A Country M.D.; Gnosis; One who has been Bitten; A Country Hack; The Secretary of the Local Government Board; M., Ludlow; Medicus; The Statistical Society of London; J. R.; C. R. E.; Inquirer; D. H. B., Warrington; A Friend in Need; Another Medical Superintendent; M.B.; J. E. C., Leeds; Phœnix; C. F. L.; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Maynard, Bishop Auckland; Dr. Macartney, Manchester; Mr. Stillard, Birmingham; Dr. Eccles, Bootle; Mr. Pearson, Cape of Good Hope; Dr. Blood, Roorkee, India; Dr. Alexander, Jubbulpore, India; Mr. Chawner, Kensington; Mr. Harrison, Manchester; Dr. Lynch, Winnipeg, Canada; Mr. Scott, Halifax; Dr. Harris, Leighton Buzzard; Mr. Curwen, Oxford; Mr. Wall, Wigan; Mr. Wright; Mr. Broughton; Dr. Fox, Topsham; Dr. Pratt, Cardiff; Mr. Hewer, Sheffield; Dr. Sykes; Mr. Liugard; Mr. Main; Mr. Thomas, Festiniog; Mr. Brough; Mr. Moore, Hereford; Mr. Hutchins; Mr. Duncan; Mr. Somerville; Mr. Blount; Mr. Thomas; A. T.; L.R.C.P.; Medicus, Bow; S. B. T.; Mentor; F. S. A., Eastbourne; T. G. W.; E. A. C.; Delta; E. B., Sheffield; Medicus, Dudley; Doctor; Practitioner, Sheffield; Medicus, Blackburn; M.R.C.S., Liverpool; Medicus, Leicester; L. R., Conway; Germanicus; D., Huddersfield; P. C. P.; H. W., Oswestry; F. W., Easingwold; Surgeon, Cambridge; C. C., Belper; Medicus, Derby; B. Y., Wisbeach.

Financial Opinion, North British Daily Mail, Mining World, Daily Post, Argus, Tribune, Age, Sydney Echo, Weston Mercury, San Francisco News-Letter, Man of Ross, Isle of Wight Advertiser, Hampstead and Highgate Express, and *Daily Courier* have been received.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, APRIL 19TH, 1877.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall	Remarks at 8 A.M.
Apr. 13	29·96	S.E.	43	46	...	56	41	...	Overcast
„ 14	30·10	E.	46	49	...	55	45	0·06	Overcast
„ 15	30·13	E.	45	47	...	54	41	...	Cloudy
„ 16	29·75	E.	39	45	...	48	43	...	Overcast
„ 17	29·66	E.	38	40	...	47	38	...	Cloudy
„ 18	29·60	N.E.	38	42	...	...	38	0.02	Overcast
„ 19	29·89	E.	40	44	...	54	40	...	Overcast

Medical Diary for the ensuing Week.

Monday, April 23.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8½ P.M. Dr. T. P. Lucas, "On the Action of Alcohol."

Tuesday, April 24.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Gladstone, "On the Chemistry of the Heavenly Bodies."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Dr. Vandyke Carter, "On the Delhi Boil."—Dr. Andrew and Dr. Duckworth, "On a Case of all but universal Paralysis in a Child following Exposure to Heat, with complete Recovery."—Dr. Laidlaw Purves, "On an International Calculating Scale for Ophthalmological purposes."

Wednesday, April 25.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
HUNTERIAN SOCIETY.—8 P.M. Mr. Rivington, "On a Case of Imperforate Anus, the Rectum communicating with the Urethra."—Mr. W. Adams, "On Infantile Paralysis."
ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.—8½ P.M. Mr. Fairbank, "On the various Morbid Conditions of the Tooth-pulp, and their Treatment."—Other communications.

Thursday, April 26.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Heat."

Friday, April 27.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—8 P.M. Weekly Meeting.—9 P.M. Dr. John Rae, "On Arctic Life" (instead of Lieut.-Gen. Strachey, whose discourse is postponed).
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Mr. T. Charters White: "A Contribution to the Life history of Botryllus."
CLINICAL SOCIETY OF LONDON.—8½ P.M. Dr. Southey, "On a Case of Idiopathic Tetanus treated successfully by Large Doses of Bromide of Potassium"; "On a Case of Parenchymatous Nephritis, in which the Dropsy was combated by Drainage-tubes."—Mr. Christopher Heath, "On a Case of badly united Fracture of the Bones of the Leg treated by the Excision of a Wedge by Linhart's Chisel" (a living subject).—Dr. Day, "On a Case of Ascites in a young Child treated by Paracentesis and Copaiba; Recovery" (a living subject).

Saturday, April 28.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Rev. A. H. Sayce, "On Babylonian Literature."

TERMS FOR ADVERTISING IN THE LANCET.

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